

AMERICAN AGRICULTURIST.



Agriculture is the most healthy, the most useful, and the most noble employment of man.—WASHINGTON.

VOL. X.

NEW YORK, JANUARY, 1851.

NO. 1.

A. B. ALLEN & R. L. ALLEN, *Editors.*

C. M. SAXTON & E. BLANCHARD, *Publishers.*

SOLON ROBINSON, *Assistant Editor.*

THE AMERICAN AGRICULTURIST AND FARMERS' CABINET.

Publication Office, 123 Fulton st., Up Stairs.

BY

C. M. SAXTON & E. BLANCHARD,

PUBLISHERS.

TERMS.

The *Agriculturist* is published on the first of every month and forwarded by mail to single subscribers for

ONE DOLLAR A YEAR.

Three copies will be sent for \$2. Eight copies for \$5, or one copy sent three years to one subscriber for \$2. Payments always to be made in advance. See advertisement of Premiums for new subscribers on the cover. Also, reduced prices for bound volumes. Subscribers may commence a year with any month. The volume commences in January.

N. B. Every subscriber who does not wish to continue his subscription, is desired to write his name and post office on this number and return it, or inform the publishers immediately.

POSTMASTERS, TAKE NOTICE.—You will please to make it known if subscribers do not take their papers out of your office.

POSTAGE on this paper is only one cent and a half, anywhere in the United States, except California. It is not chargeable with pamphlet postage. For terms of advertising, see cover.

CONTENTS OF JANUARY NUMBER.

Review of Professor Johnston's Notes on American Agriculture.....	10
Interchange of Visits among Farmers.....	12
Bad Farming.....	13
Economy in Human Food; A Fact in Deep Plowing....	14
Raising Geese; Potato Rot; Harvesting Turnips.....	15
Jersey Farming; To Cure Stings and Bites; Imported Berkshire Pigs; Plaster upon Clover.....	16
Cure for a Foundered Horse; New Plan of Growing Celery; Watering Crops; Economy for Using Mules, N. Williams.....	17
Conversation about Delaware; Ice Preservers; Price of Peaches in London.....	18
Steam Plowing.....	19
Letter from Virginia.....	20
String Halt—Is there any remedy?; Cheap Blacking for Harnesses.....	22
Salt for Cattle and Sheep; Farmers' Clubs.....	23
A Northern Country House; Bean Straw.....	24
West-Highland Cattle; The Price of a Flower.....	25
Oats an Exhausting Crop; Village Lectures, No. 3.....	26
The Great Poultry Show at Boston, Solon Robinson....	27
Review of the November and December numbers of the <i>Agriculturist</i> , Reviewer.....	29
Mouldy Beans; A Day in Westchester County, Solon Robinson.....	31
Goose and Duck Pasture, Inquirer.....	32
The European Quail.....	33
Small Farms; Stealing Fruit; Cold, or Catarrh in Sheep; Connecticut Tobacco.....	34
LADIES' DEPARTMENT: Fancy Biscuits; Coloring Green Tea; Alum Whey; Preserving Wild Fowl; Almond Flavor for Pastry, &c.; Almond Paste; To Make Blanc; A Valuable Cement for Household Use; Egg Biscuits; To Remove Grease Spots from Furniture, Wood, or Marble.....	35
Foreign Agricultural News.....	36
Editors' Table.....	37
Review of the Markets.....	38

REVIEW OF PROFESSOR JOHNSTON'S NOTES ON AMERICAN AGRICULTURE.

In the *Edinburg Quarterly Journal of Agriculture* for September, is published Professor Johnston's *Notes on American Agriculture*, from which we clip such passages as appear most worthy of comment, and upon them express our opinion freely without noticing the other portions.

The first part of the following extract is what we might naturally suppose would be the most surprising thing to an Englishman; that is, our "horrible slovenliness" in farming; and the balance describes some of the beauties of our self-taxing beautiful fencing system. The whole of the article, from which the extracts are taken, might be very properly headed, "English Opinions of American Farming." We hope the extracts will be read and duly considered for our benefit:—

"In noticing some of the peculiarities of American farms and farming, one cannot fail to be surprised at what has been termed the horrible slovenliness of American agriculturists generally. And first as to fences. They may truly be said to be of the rudest description. So far as we can recollect, we did not see a real good-looking English fence during our visit, and we have been in the best agricultural districts of the state of New York. We will describe one very favorite form—we may call it the zigzag fence. A number of wooden rails, or pieces of scantling, no matter how rough and crooked they may be, are first obtained. One rail is laid in the ground, then another is laid so as to form an angle with the first one, its end resting on that of the first. A third rail is then laid on the end of the second and forming an angle therewith; and the same is done with a fourth rail, and so on. Other loose rails are laid upon them until a proper height is obtained—this is generally four or five feet. The whole forms a peculiarly unstable-looking fence, but it is in reality very strong and capable of resisting considerable opposing force. The whole is upheld without the assistance of a single nail, or other fastening. It is this peculiarity, doubtless, that has caused it to be adopted. It is, however, obvious that, in its construction, a vast quantity of wood is uselessly expended. This, however, is of little moment in the interior, where wood is so plentiful. The farmers are very fond of this species of fence, ugly and cumbersome as it is. 'So stupidly attached to this form of fence are some old people, that when they build wall fences they build them in and out, in the same zigzag way that they have been accustomed to

do their rail fences.' As may be supposed, the gates in farms are quite in keeping generally with the rudeness of the fences. Posts are driven in on either side of the gateway; and in the inside of these, holes are cut at equal distances; in these holes, rails are inserted—of course loosely—all of which have to be removed when a cart, for instance, is required to pass through. Regularly hung gates are sometimes used; these are, however, rude enough in their construction. To balance a gate, you will see the topmost piece of timber extended five or six feet over the post to which it was attached. On this piece of timber, you will sometimes see a trough filled with stones, while at other times, a huge piece of wood is attached. It is needless to say, that, in all well-conducted farms, the fences, &c., are admirably constructed and arranged. This unfortunately is the exception, not the rule."

This is a modest description of the manner in which these, to us, familiar sights, strike the senses of a stranger. He might have told his readers that we pile up these zigzag fences sometimes sixteen rails high; that they rot down every seven years and have to be replaced at an enormous expense of toil; and that no agricultural people in the world are so severely taxed as the self-inflicted fence tax of the American farmer.

The enormous expenditure of time, money, and waste of lands, to say nothing of inconvenience of cultivation, occasioned by stone walls, seem to have escaped the writer's notice; and no wonder, when we consider how he must have been dazzled and confounded with the sight described in the next paragraph.

"But the fences and gates are not the only things displeasing to the eye of the scientific farmer. The appearance of some of the fields of a comparatively new tract of land is peculiarly odd. On clearing land, the trees are cut down some three feet from the ground; the stumps, thus left, are allowed to remain in the ground till they utterly decay. They are generally black and scorched looking; this is owing to their being burnt, which prevents vegetation from proceeding after the trees are cut down. This, as may be judged, has a tendency to preserve the wood for a much longer period than otherwise would be the case if allowed to remain unburnt. One enterprising farmer told us that he never burnt the stumps, but allowed them to remain to decay naturally. The period taken in such cases is ten years; when charred, much longer. The stumps, thus left, almost invariably burnt and charred, present a curious

appearance when they peer up amidst the green herbage surrounding them. A stranger, at first sight, is exceedingly apt to take them for diminutive cattle, or black sheep, scattered over the field."

The following is a description of land in the very best farming district of New-York state—the far-famed Genesee county. We give it here as it forms an admirable description of the slovenly confusion too often seen in the neighborhood of farms. We have toiled through such a place, in the heat of summer, within a gunshot of a farm house belonging to a farmer who was considered quite a scientific agriculturist.

"Weeds, and rough-looking grasses, and fallen trees, which seemed to have been rotting for ages; old stumps, some black and half-burnt, others grey and half-rotten. Trunks of trees, some ten, some twenty or thirty yards in height; some rotten and ready to fall; some sound, and some strong; some black and half-consumed by fire; some crumbling to pieces by decay; some split, some hollow, some fallen, some standing; some with their roots pulled up, but most of their roots in the ground; some amidst the grass, some in the orchards, some amidst the corn. Fancy such a scene and condition of affairs on an English farm!"

Fancy, indeed, it would be, for none can have any idea of the reality, until they have visited this or some other new country. Much of the appearance of things described is a necessary accompaniment of all clearings of forest land. One thing noticed is worthy of attention; that is, the burning of stumps prevents their decay, when decay is the very object sought. It is better never to set fire to a stump unless it is rotten enough to consume entirely, and even this may be considered doubtful policy, as the rotten wood is a constant source of fertility to the surrounding land. The same may be said of dead trees, however unsightly they may appear, particularly to an Englishman; they serve to keep the land fertile during their gradual decay. We even doubt the policy of burning piles of logs. If left to decay, which they will do in a few years, the residue is a mass of fertilising matter. Col. Williams, a planter on the Pee dee, in South Carolina, buries the logs instead of burning them, and finds his account in it. Many farmers are in the practice of picking up and burning all the chips and trash upon clearings. Better let them be and slowly decay.

Here is what the same sensible writer says of our farming tools, which shows that he is not like some of his countrymen. Aye, and some

of our own, so strongly wedded to their idols they can see no good in nothing else:—

"The agricultural implements in the United States are much lighter in construction than in this country, the plows particularly so. These are well adapted for the peculiarities of the land. It would be impossible to plow land recently cleared, with all the stumps and roots scattered here and there, with the heavy plows of this country. It is astonishing to see how easily the farmer turns aside from the stumps; and even should he fall foul of one, the plow is so light, that he can *fillip* it past the obstruction very easily. Old-country farmers are disposed to find fault with them, but they are soon taught to perceive that they are very well adapted to the kind of labor they have to perform. With reference to other implements, the same rule holds. The hayforks are amazingly light and handy—a young boy can easily use them. Scythes, hatchets, &c., are all made exceedingly light and portable, and in this, we think the Yankees show real wisdom. There is no real utility to be gained by having huge, heavy instruments to deal with. A farmer who had had, both in this country and in America, much experience as a hard-working man, told us that the result of his experience, was, that more work could be done in the same space of time, and with less fatigue, with the Yankee tools than with those of this country. The axes used for felling trees are very light; we must confess that, at first sight, we thought that heavier heads would have been better; but a sight of the execution they performed in good hands, on the sturdy sows of the forest, soon showed us our mistake. The horserake is almost universally used for gathering the hay off the fields, and forming it into cocks. There is scarcely such a thing as reaping grain by hooks, as here performed, the common scythe, or more generally the cradle scythe, being used. It is astonishing how much one man can cut down in a day. There is great rivalry in this point amongst farm servants."

The following extract will delight many a Yankee boy whose pride is to exhibit the handsomest and hardest yoke of oxen at the "Fair." We really wish this extremely intelligent traveller and commenter upon our farming operations could be present at some of the great shows of working oxen—a class of domestic animals with which we can challenge the world for competition, both in beauty of form and matching, as well as their wonderful docility and strength. He might then witness feats worthy a well-trained pair of horses and skill-

ful driver. The writer is a little mistaken in the assertion of the first line, as in some parts of the country oxen are rarely used:—

"Oxen are invariably used for farm purposes, carting of hay, &c. Some of these animals are really wonderfully well paired. A friend of the writer's had a pair so beautifully matched, so alike in every respect—color, size, and even shape and length of horns—that it was difficult to distinguish between the two. The same farmer had a young pair which he was rearing for the purpose of exhibiting at the great State Fair; their color was pure white. We believe he gained the first, (or one of the first,) prizes for well-matched oxen."

It is the pride of exhibiting the premium oxen, much more than the premium, which makes the first lines of the following paragraph so full of truth. The description of a Yankee cow stable will be new to many of the London readers, and as little interesting as it may be to those so familiar with such things "to home."

"Farmers vie with one another in rearing handsome, well-paired oxen. Much more attention is paid now than formerly to the rearing of stock. The cow houses are all constructed of wood, and have arrangements for feeding and housing, very peculiar. In the centre of the house, there is a division railed off on each side; on this wall, or central alley, the fodder is placed. The cattle are ranged on either side. By lifting up pieces of wood, placed in these rails, space is made for allowing the animal to insert its head and neck so as to partake of the fodder within the inner division. The piece of wood is let down, thus confining the neck and head of the animal in one position till released. The cattle seem to have no objection to this kind of restraint."

The following tribute to American horses is truthfully graphic, but cannot convey to the mind of the owners of the slow-gaited heavy road or farm horses of England, a just idea of the excellence of our light-footed, lively and most excellent animals. The way they are used as described in the last sentence is enough to tell the story of the unsubduable spirit of American farm horses, to say nothing of the same quality in the younger branches.

"The horses are invariably slender, and at first sight, a European fancies they are too much so to do much heavy work. This is not the case; they are high spirited, and capable of undergoing much fatigue. They are used for all kinds of work; no such thing being seen, so far as we remember, as horses kept for one

particular kind of jobbing. After a hard day's work in the fields, the spirited animal is glad to have a run of ten or twelve miles harnessed to a 'buggy,' conveying perhaps the younger branches of the family to a frolic in the neighborhood."

Some of the statements of the next paragraph we are disposed to correct. In speaking of American farm houses, the writer says:

"They are generally made of wood, placed in some cases on low stone basements to protect them from the damp. They are commodious, and generally well arranged; the kitchen is always the largest apartment in the house. The most striking external peculiarities of American farm steadings, is the long range of wooden outhouses, and the entire absence of all appearance of grain, &c. The former is caused solely from the fact that the corn, hay, and in fact all crops, are housed, not made up in stacks as here done. This custom necessarily requires large and commodious outhouses to be constructed."

INTERCHANGE OF VISITS AMONG FARMERS.

We wish the farmers of the United States were more in the habit of assembling together, and interchanging visits with each other. We are certain it would be for mutual advantage to do so. They would thus become sooner acquainted with each other's improvements of different kinds, which would be of vast benefit to them, as a class; and then, how agreeable an increased social intercourse might be made. The farmer, now, is altogether too isolated; and this is the reason he is so generally behind the mechanic and manufacturer in adopting the improvements which they so eagerly seize. See from the following example of Mr. Mechi, how they manage these things in England.

"On Tuesday last, several hundred gentlemen assembled at Mr. Mechi's farm, to pay it a visit of inspection. They came from every part of the country, and were, in all respects, fit people for such an occasion. They were large farmers, intelligent land agents, and enterprising, liberal proprietors. The church was worthily represented by the presence of half a dozen clergyman, and Messrs. Ransome and May, of Ipswich, and Mr. Crosskill, of Beverly, were there to see that the farm implements were what they should be. With a long train of curious and interesting agriculturists, Mr. Mechi visited every field on his farm, sometimes skirting along the headlands, sometimes dashing through the centre by the help of a water furrow,

and still the concourse poured on their way, and listened to the animated explanations which their inquiries drew forth. Often amidst the tall crops of wheat, their heads alone visible over the waving mass, were knots formed, and rapid discussions carried on, with reference to matters of practical detail. At one moment the virtues of box manure were discussed; then the expediency of growing wheat oftener than by the present systems of cropping; then the merits of thin sowing; then the efficacy of thorough draining on stiff clay; then the proper method of securing deep disintegration, and a fine tilth. On all these topics, the changes of conversation rung; and, amidst them all, ran an under current of commentary and calculation on the amount of produce which each field would yield. It was confessed on all hands that the wheat crops were splendid ones. For the last six years, Mr. Mechi has grown wheat alternately with green crops every second year, and he expects, as the result of the present harvest, a return of five quarters to the acre. His show of beans, potatoes, clover, mangold wurtzel, and turnips was also very creditable to him. On the second-mentioned crop, he took occasion to point out its remunerative character, and the prejudices which existed against it, while, with reference to the last, he dilated, as the result of his experience, on the virtues of superphosphate as a manure. Mr. Mechi has a hearty contempt for the fallowing system which prevails so extensively in Essex, and especially in the district called the 'roothings.' His idea is, that the land should be deeply stirred, kept thoroughly clean, and be maintained in constant and high cultivation."

There, now, this is exactly what we like; and when we get on our farm again, we intend to invite all our neighbors, far and near, to come and see us occasionally. We will give them a plain lunch of bread, beef, and cheese; and then we will walk out and show them our grass, grain and root crops; our implements and method of using them; our flocks and herds; our orchards, groves, &c. Many are the good hints, in the way of improvement, that we should get from our visitors, we have no doubt; and perhaps some one among them would now and then pick up beneficial ideas from our management, or what we might have to show them.

There is nothing like stirring the waters to keep them from getting stagnant; and there is nothing more pleasant nor improving, than for farmers, gardeners, clergymen, lawyers, doctors, mechanics, and country gentlemen, living on their fortunes, to meet together occasionally

and look over each other's doings, and have a good social chit chat about them.

BAD FARMING.

Sowing wheat upon land without plowing is considerably practised in various parts of the United States, particularly in the south; the seed being covered with a very light plow which merely scratches the surface. This is *bad farming*. How can a crop be expected when thus put in? It is contended by the advocates of this labor-saving crop-losing system, that land, which has borne a crop of corn and peas, and been fed off by stock, is always *clean* and fit to receive the seed. True, but being *clean* is not all that is required to make the young plant grow. Fresh, newly-pulverised soil is as essential to give the seed life and power to vegetate, as it is necessary to pulverise the grain for the use of man, to enable him to obtain the full supply of nutriment from the life-giving substance, when properly fitted by grinding and mastication to be taken into the human stomach. No matter how *clean* your ground may be, never sow the seed upon it, before it has been previously well prepared by the plow—the most important machine ever invented by man.

Planting corn, before plowing the ground, is another instance of very bad farming. This is also much practised at the south. The land is *listed*; that is, marked off for the rows by turning a couple of very light furrows together, leaving the centres to be broken out after the corn is planted. One half of the labor of tending a crop, to say nothing of its increased quantity, might be saved, if the ground were well prepared before planting. The excuse for this slovenly plan is this: The planter says he can tend more acres than he can plow previous to planting, and it is important to get the seed in the ground and do the plowing afterwards. The plan may produce him more corn, but we doubt it. If the ground were well prepared before planting, it would require less labor afterwards, and undoubtedly produce more to the acre.

These hints are not all intended for the south; northern farmers are guilty of bad farming, also. We have seen many hundred acres of oats sown before plowing and then plowed in. A very common practice, is, to sow oats on corn stubble, first *splitting the hills*, by running a furrow through them with a one-horse plow. In this case, one half the seed falls upon a surface as unfitted to promote vegetation as a brick pavement. In turning this over, many of the seeds are buried beneath the clods and lost forever. If you desire good crops, you must use

good tools—yes use them—plow deep—pulverise the soil—fit it to produce a harvest, and it will never disappoint you, except in an occasional visitation of some unavoidable circumstance that Providence may inflict upon you.

Neglecting to set out fruit trees, is another evidence of bad farming, which pains the eye of every observing traveller in America. With the best fruit country in the world for the most substantial and important kinds, we have thousands of farms as destitute of a good apple, pear, peach, quince, plum, cherry, or currant, as though God had forbidden them to grow and gladden the hearts of men in this fertile land.

Another evidence of bad farming is, the neglect of that great source of comfort and luxury to every farmer's family—the kitchen garden. But where shall we stop with our evidence? We will do it here and submit the case to the judgment of an improving community.

ECONOMY IN HUMAN FOOD.

MANY persons are unaware of the great difference of nutritious matter contained in different articles of food in daily use. One might distend his stomach like a bladder, upon turnips and yet have very little to sustain life or give him strength to labor. Potatoes contain much more nutriment than turnips, but nothing like the proportion, according to bulk or cost, that is contained in many other substances used as human food. The figures annexed to the substances named below will show the relation they bear to each other and the proportion of nutritive matter that each contains in 1,000 lbs. of the raw material. For instance, 1,000 lbs. of winter wheat contain 955 lbs. of human food; spring wheat, 940 lbs.; blighted wheat, 210 lbs. to 650 lbs.; barley, 940 lbs.; oats, 743 lbs.; rye, 792 lbs.; beans, 570 lbs.; dry peas, 514 lbs.; potatoes, 230 lbs.; red beets, 148 lbs.; white do., 136 lbs.; carrots and parsnips, 98 lbs.; common turnips, 44 lbs.; Swedish do., 64 lbs.; cabbage, 73 lbs.

By this, it will be seen that it is poor economy to purchase many of the coarse kinds of food in common use. Potatoes must be considered articles of luxury rather than cheap diet, when they bear a price per pound almost equal to wheat, rye, beans, and peas, to say nothing of Indian corn, the relative proportion of nutriment of which we are not able at this moment to give; but at the average price it bears among us, we are convinced it is the cheapest food grown in America.

There is a great want of *tact* in many householders about economising food. At present pri-

ces, sugar is an economical as well as a healthy article; but when properly combined with flour, meal, or fruit, which are more economical than bacon and cabbage, it is generally acceptable to all palates. We have just read an article in the Cincinnati Atlas, of the *tact* of a poor woman who found herself entirely destitute of food or means to procure it to feed herself and seven children, with the exception of eight laying hens. One egg a-day would not fit the human frame for labor if it would sustain life. Here was a case for the exercise of *tact*. Six eggs would exchange for half a peck of beans each day, and these made into soup, with a little piece of cheap meat, obtained with the other two eggs, served to feed the family very comfortably until Providence, who always helps those who help themselves, should provide something better.

This woman in working her way through the difficulties, has taught her children a lesson of economy and manner of providing for themselves out of small means, well worthy the attention of thousands who may be now well-to-do in the world, and perhaps think they have no need of learning such severe lessons of economy. We hope that may be the case, yet who shall say? Let the lesson be learned and practised, if circumstances ever require.

A FACT IN DEEP PLOWING.

HAVING been for a long time an attentive reader of the Newspaper, especially the farmers' department, and having seen many articles on the cultivation of corn, I have concluded to give you my experience for the last two years. Previous to that, I had followed the old plan of shallow plowing and high hilling. Now for the other way. In the spring of 1849, I took five acres of ground that had wheat on it the year before, and had for a number of years been rather hard run by sowing in wheat one year and planted to corn the next, until the surface soil was worn so low, that twelve bushels of wheat and forty or fifty of corn were an average crop. On the five acres, I put eighty-seven loads of barnyard manure, the greater part of it straw, only partially rotted, and plowed it as follows:—Taking two teams and two plows, I began by a furrow seven inches deep with the first plow, then followed in the same furrow with the other plow, turning another furrow six inches deep, making thirteen inches of soil turned. I then harrowed and marked it making the rows four feet apart both ways, and planted on the 22d of May. As soon as the corn was large enough to follow the rows, I cultivated it out

both ways, and had a man to follow with a hoe to set up the hills that were partially covered up. I went through it twice afterwards with the cultivator, but made no hills, leaving the surface as level as possible. I cut it up the 17th of September, and from the five acres, husked seven hundred and six bushels of ears.

Now, I don't call this a brag crop, for I am well aware that it can be beat; but it shows the difference between half doing work and doing it well. The corn was hauled off and the ground sowed to wheat, being plowed as deep as a pair of horses could plow it; and from the same ground, I have this year harvested and threshed one hundred and ninety bushels—thirty-eight bushels to the acre. I have managed my corn ground in the same manner this season, and from present appearances shall have as good a crop as I had last.—*Dollar Newspaper.*

RAISING GESE.

A GOOSE is more easily raised than any other domestic bird of our experience. Here is the simple course we pursue: Feed the geese kept for breeders, moderately well all winter with a mixture of grain and boiled roots. Provide a warm, dry, well-sheltered place for sitting; and when the goose is on the nest, give her regular daily food, principally of cooked vegetables, lest she should get costive, and plenty of fresh, clean water. When sitting, a goose does not eat nor drink so much as ordinarily. If she inclines to come off the nest, let her do so; and even let her go to the water and swim and dive to her heart's content. She is only taking a necessary ablution; and as to the idea that she will get wet and chill the eggs on her return, it is all nonsense. Who ever saw moisture adhere to the feathers of a well-fed, healthy goose?

After the goslings are hatched, let them run with the goose on grass, but be careful that they are not exposed to wet, the first week of their existence; after that, there is little danger, unless the rain be particularly cold and enduring. With a small allowance of boiled vegetables, mush, or oats, the flock will do well the first fortnight; after that, they will subsist almost entirely on grass and in the water. In the fall, feed well with boiled vegetables and grain, and they will soon be sufficiently fattened for the market.

In order to guard against rats, minks, weasels, and other vermin, the goslings should be penned every night, till nearly half grown, within a tight board or iron-wire fence, (the latter is much the best,) about three feet high. Be par-

ticularly careful there is no hole in nor under the fence, that a rat or weasel can crawl through; and the fence must be so constructed that they cannot climb over it.

POTATO ROT.

THE potato crop has suffered much this year from the above-named malady. I have visited many fields, before and during the season of harvesting, in different sections of New Jersey and also in Orange, Dutchess and Westchester counties in New York, and as far as my observations go, I do not think there will be over half a crop. The Mercers have suffered more than any other variety, being an entire failure in the same field with others which have turned out sound.

I planted this kind and gathered about one half of a reasonable crop more or less affected. These I spread in sheds and stables exposed to the air, and commenced boiling such as showed signs of decay. I mashed them by pounding down in a hoghead, sprinkled with salt, and commenced feeding them to hogs and cows; and they ate greedily of them when mixed with ground feed. In this way, I saved them all and there are still some on hand as sweet and fresh as the day they were packed. About two thirds of the whole gathered, showed signs of decay and were thus cooked; the remainder are sound and fit for use.

I mixed charcoal with the compost of a small portion of the ground planted; where this was done, there was no rot. SAMUEL ALLEN.

HARVESTING TURNIPS.

PULLING turnips and cutting off the tops by hand and knife, which is almost the universal practice among American farmers, is about as far behind the age of improved husbandry as digging up the land with a hoe, instead of plowing. In England, turnips are almost invariably planted in drills; at pulling time, the laborer passes along the row with a sharp, light hoe, with which he dexterously cuts off the tops, throwing them by the same motion, into the hollow between two rows. Another person follows with another hoe, which he strikes below the bulb, so as to cut off the tap root, throwing the turnips of two rows together, ready for the gatherer to basket and carry to the pile or cart for storage. Sometimes one hand performs both operations of topping and digging, but two work to the best advantage.

Great skill is acquired by practice in cutting the tops, as well as dexterously raising the roots.

NEW-JERSEY FARMING.

Draining Land—A Big Ditch.—In our November number, we gave some account of the farming operations of Mr. Buckalew. We have a few more notes of his successful improvements. Near his house, he has a saw and gristmill upon one of those beautiful gravelly-bottomed streams which abound in that state. Below the mill, this stream winds its course through a timbered swamp of some hundred and fifty acres, every bend and fallen tree obstructing the course of the stream, so as considerably to injure the water power, besides keeping such a large tract of rich land lying worse than useless.

This state of things was not to be endured by one possessing such an energetic disposition to make improvements as Mr. Buckalew, and he at once determined to clear and drain it. This Herculean task, he has nearly accomplished, by cutting off the timber, wood, and lumber, which almost paid for the labor; and then straightening the creek by a ditch a mile and a half long, twelve or fourteen feet wide, and six feet deep. This had the effect not only to drain the land, but greatly add to the value of his mill property. Into the big ditch, he is now cutting side ditches, and some of the swamp has become dry enough for grass, and the whole undoubtedly is now the best land upon the farm. The excavation from the ditch was a mass of vegetable fibre which makes excellent manure, when composted, and is very beneficial when used just as it comes from the swamp. Altogether, this is one of the greatest undertakings in the way of swamp draining that has lately come under our notice. There are thousands of acres in New Jersey which might be treated in the same way.

Benefits of Railroads to New Jersey.—No state in the Union has been more benefitted by railroads than this. Had it not been for the Amboy Railroad, Mr. Buckalew would probably never have cleared the above-mentioned swamp, because the wood and timber would not have been of sufficient value; neither would those 60,000 peach trees ever have been planted, because this fruit would have been quite worthless. Land, which was once considered of no value, is now highly estimated, because the railroad gives a market for everything grown, at almost city prices at the very door of the farmer.

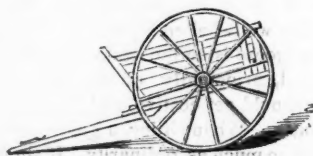
The advantages of railroads to agricultural improvement are never duly estimated. Sanguine as were the original projectors of the Amboy road, that it would be a great passenger thoroughfare, they never imagined how much benefit it would be to farmers, or what wonders

it would do to improve the agriculture of the country.

Mr. Buckalew related an anecdote in point to this effect; that when it was first talked of putting a freight train on the road, one of those shrewd gentlemen, the Messrs. Stevens, thought such a train could not be supported—that perhaps one car a-day might find employment. This conclusion was perfectly natural to one who knew what a miserable tract the road was located through. But what a change a few short years has made. During the past season, it has hardly been in the power of the company with the best-furnished road in cars and engines in America, to keep the depôts clear of freight. It is a subject worthy of serious reflection.

ADVANTAGES OF LARGE WHEELS TO HORSE CARTS.

The advantages of large wheels to horse carts, are obvious, as they greatly increase the facility of draught, and tend to lessen the number of accidents to which all two-wheeled carriages are liable, from the shaft horse falling down.



LARGE-WHEELED HORSE CART.—FIG. 1.

By adopting large wheels, and a bent axle, as denoted in fig. 1, the cart becomes less liable to such accidents, as the centre of gravity, (the fore end of the cart body,) and the centre of suspension, (the axle,) are brought much nearer together, the former being placed nearly over the latter, at a small distance only from it. A horse falling with a loaded cart so constructed, will experience but little increase of weight upon him while down. The centre of gravity will be thrown forward, but in a very trifling degree. In carts, &c., it will almost always happen that the centre of gravity will be above the point of suspension (the axle); but in gigs, &c., the body may be placed so low that the centre of gravity may fall below that point when the body will always maintain the erect, (that is, a horizontal,) position, and should the horse fall down, will operate to lift him up again. A gig so constructed would be almost beyond the possibility of those serious, and frequently fatal accidents, which occur from the falling of the horse.

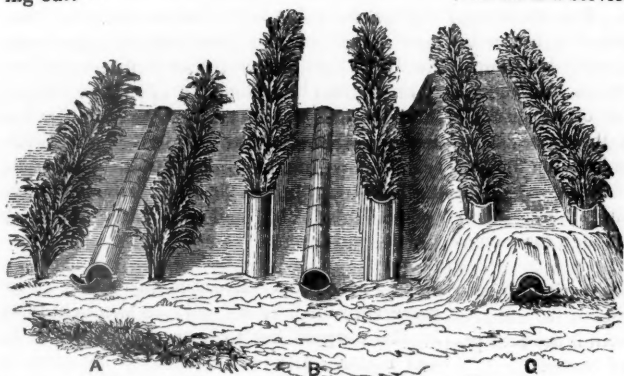
CURE FOR A FOUNDERED HORSE.

HEAT a tubful of water to the boiling point, and bathe the legs from the fetlocks up, as hot as it can be applied. If rubbed downwards, it will take off the hair, if the water is used as hot as will be beneficial. Now wrap the foundered leg in a thick blanket, well bound on, and saturate it with hot water, being careful to wet it from the bottom upwards. In two hours, repeat the operation, and continue until the swelling is removed.

A good purge for the horse during the application will be sage tea, made strong, molasses, and melted lard, each one pint. If the founder is very bad, bleed in the neck. You need not fear scalding the hair off, if you follow directions. This is worth the price of the Agriculturist a dozen years.

NEW PLAN OF GROWING CELERY.

MR. JOHN ROBERTS, 34 Eastcheap, London, has lately published a pamphlet, containing a new method of growing celery, with his patent socket tiles, which is represented by the following cut:—



ROBERTS' PLAN OF GROWING CELERY.—FIG. 2.

A, represents two rows of celery in the trench before the sockets are used, with the horizontal tube placed between them for the purpose of watering.

B, shows two similar rows with the sockets placed round each head of celery prior to earthing against them.

C, shows the celery earthed up, as it appears in autumn, previous to harvesting, or covering up for winter use.

WATERING CROPS.—Never irrigate grain nor any other arable crop, except lucern, unless it be while plants are growing, in the greatest droughts.

ECONOMY OF USING MULES.

It is still a mooted question which is the most economical for plantation purposes in this country, the mule or horse. Many use both, some use only mules and wont have a horse for ordinary work upon the place, while others will not have a mule; but as I stick to the latter, I propose to give some of my reasons for the preference, and a neighbor of mine who is altogether in favor of horses, has promised to answer me through the same medium, if you see proper to publish this communication.

According to my experience, in which I am backed by "Old Joe," who was an old man as long ago as I can remember, and for many years head man of my father's, mules live twice as long as horses at the same kind of work. We have mules now upon this plantation that have worked thirty years; that is, from three years to thirty-three or thirty-four, if I can depend upon the same authority above quoted, as he says they were bought the year I was born. Certainly there is one which has been called Old Joe's mule ever since I can remember anything; and he is a serviceable old fellow yet. He and

his old driver, now as free as his mule or his master, have both grown grey together; and it is sometimes a question with Mrs. W., when she looks upon the old man mounted in his car with three or four of our children, which he has the most affection for, his old mule or his young masters. But to proceed with my argument.

Instances are known of mules living sixty years, but that is probably as unusual

as for a horse to reach the age of thirty. I am satisfied they average twice the age of horses.

Mules are not so liable to disease as horses; as the great annual loss of horses all over the country will fully prove. I have been told the death of horses, in the city of New York, is so frequent, that many persons are procuring mules, and that some of the owners of omnibus lines have it in contemplation to substitute mules. How is it?

Mules rarely go blind, which cannot be said of horses. I was in Baltimore last summer, and it appeared to me that almost half the horses in the streets had lost their sight. The hearing of a mule is much more acute than that of a horse and from this fact, and that they see better

they are much less likely to sheer off or frighten at sight or sound of any object along the road side, which a horse does, because he imagines he sees or hears something frightful, while the mule, with his clear eye and quick ear, detects the truth at once. For this reason, a mule is surer footed than a horse, and is therefore greatly preferred by travellers over mountains and dangerous paths; and for the same reason, mules ought to be preferred for the use of ladies and children; and when well trained, are sufficiently spirited for all ordinary purposes.

Mules are able to endure the heat while laboring much better than horses. I have a very small pair which are nine years old, that I should not hesitate a moment to match against a pair of horses of the same age and double weight, to plow twice as much ground in one week of summer weather, to forfeit the team that first failed, the horses to be allowed just twice as much food as the mules. And this is no inconsiderable item in favor of mules upon a plantation, and still more where food is to be purchased; for it is a well-known fact that a mule will live and work well upon rations that a horse would starve on in a month. The enormous quantity of human food consumed by horses in this country, and more particularly in Europe, is a matter of serious consideration, and should be a strong argument in favor of substituting animals that would perform the same labor while consuming less than one half the food.

I could go on at great length with my argument in behalf of my favorite animal of all work, but I think I have said enough for a commencement of the controversy.

Please to continue to send the *Agriculturist* to all the subscribers on the enclosed list until ordered discontinued, as we esteem it the best paper of the kind in the United States.

N. WILLIAMS.

Nov. 9th, 1850.

CONVERSATION ABOUT DELAWARE.

Yellows in Peach Trees.—Our friend Colonel Johnson has been paying a visit to the Messrs. Reybold, the great peach culturists of Delaware. In a recent conversation, he mentioned many interesting particulars of his visit, one of which was the flourishing condition of one peach orchard that had been liberally dressed with ashes, one of the best applications that can be made to old or long-cultivated land. Upon the farm of the Hon. John M. Clayton, who by the bye has a most beautiful one on the Newcastle Railroad, he saw some very thrifty peach trees that had been saved

from the yellows by an application of fish oil, spread with a brush or swab, like paint, upon the stems of the trees. Our opinion, is, that any application which acts as a fertiliser, is beneficial in preventing diseases of trees, as it promotes a vigorous growth; and healthy trees are not so likely to be affected by the yellows nor any other complaint, as those which cannot find sufficient nutriment in the soil to sustain them in a healthy condition.

A Delaware Wheat Crop.—John C. Clark, a Newcastle-county farmer, where Col. Johnson visited, was engaged while he was there clearing up his crop of wheat, which he grew the past season upon one hundred acres. He had already measured 3,000 bushels, and has some remaining. Upon one field of thirty-seven acres, he had 1,410 bushels, good measure, of fine wheat; that is, forty bushels to the acre. Upon another field of thirty acres, he averaged thirty-five bushels to the acre. Mr. Clark's wheat is the Mediterranean variety, which is the favorite sort in Delaware and Maryland. There are but few wheat farmers in any part of the country who show a better result than this.

Reclaimed Marsh.—The Messrs Reybold have most valuable crops now growing upon lands that were almost worthless before being reclaimed from the dominion of water. Major Reybold had one of these tracts in cultivation many years ago until it lost its original fertility, and now suffered to be again flooded. Upon taking it in again, last year, it was found to have an accumulation of alluvium several inches thick all over the surface.

ICE PRESERVERS.—Every family needs an ice preserver; for it is not only an excellent thing for this purpose, but to keep meat, fruits, milk, and butter. Articles of this kind are made in New York, at prices ranging from \$10 to \$100. Ice may be kept in them several weeks, with a great saving of time. It is quite a loss to be obliged to open the ice house every day; and if we depend upon the daily calls of the ice cart, it costs twice as much as if we laid in a week's supply at a time.

PRICE OF PEACHES IN LONDON.—A London letter, of the 21st June, says: Peaches for the past week are more abundant than they have been for the previous month, and consequently at more available rates—varying according to quality, from 26 shillings to 30 shillings sterling, per dozen—equal to \$6.50 to \$7.50 United-States currency. They are of course raised, (like grapes,) in hot houses.

STEAM FLOWING.

WE subjoin some excellent suggestions from C. W. Hoskyns, on the subject of steam plowing, which we find in a late number of the *Agricultural Gazette*. That a wide departure is to be made from the present mode of plowing, whenever the steam engine shall be substituted, we have not the slightest doubt. There is a serious injury to the subsoil from the use of the plow, as there is a pressure upon it equal to the weight of the implement, the entire superincumbent furrow to be lifted, and the force required for dividing the uplifted mass of earth from the stationary portion below. In some fields that have long been subjected to cultivation, at uniform depth, the surface of the subsoil has nearly the density of a stratum of rock. This opposes a serious obstacle to the progress of roots, and materially lessens the growth and amount of the crop.

There is a conservative or counteracting effect produced at or near the surface, by the action of frosts and the elements, by which the particles of the soil are so effectually separated, that when dug from a hole and again, (however carefully and lightly,) returned to it, they fail to fill up the space before occupied. But we believe this is seldom the case with the subsoil.

The principle suggested by Mr. Hoskyns, has, as an experiment only, (for we are not aware of its adoption as a practical matter,) been for some years introduced into France and perhaps into England and elsewhere; and we have had a small cultivator constructed on the same principle, which, however, has justly failed to command any favorable attention. Thus we are left just as far from any utilitarian discovery as before. But to the quotation. Mr. H. says: I hold it to be an idea *fundamentally erroneous* to attempt to combine steam machinery with the plow. And I hope I am not presumptuous in repeating my conviction, that, until the idea of the plow and in a word, of all *draught-cultivation* is utterly abandoned, no effective progress will be made in the application of steam to the tilling of the earth. I repeat what I have said before, that plowing is a mere *contrivance for applying animal power to tillage*. Get out of animal power, and you leave plowing behind *altogether*. Get into steam power, and you have no more to do with the plow, than a horse has to do with a spade. It is *no essential whatever* of cultivation that it should be done by the *traction of the implement*. Spade work is perpendicular. Horse work is horizontal. Machine work is *circular*.

Whoever would now dream of retaining the

form of the hand flail in the threshing machine, or that of the oar in a steam ship, or of putting the piston rod to work at the lever end of a pump handle? Yet doubtless these bastard attempts were all made in their day, till the several inventors had come to see in turn that

"'Tis good to be off with the old love
Before ye be on wi' the new."

I am aware that I am repeating myself, unavoidably, in all this; but no one can imagine, without trying it, the difficulty of making the mechanical part of the question intelligible to the agriculturist, and the agricultural part to the machinist. The steam engine has no taste whatever for straight draught. He is a *revolutionist*, in the most exact sense of the word. He *works* by revolution; and by revolution only will he cut up the soil into a seed bed, of the pattern required, be it coarse or fine. And *that*, it is my firm belief, he will be seen doing at a handsome average, before a very large portion of another century shall have passed over our heads. Why should it not be? Why should not a strip, or lair, of earth be cut up into fine tilth *at one operation*, (and sown and covered in, too,) as easily as a circular saw cuts a plank into sawdust? As to employing a steam engine to turn a drum, to wind up a rope, to drag a plow, to turn up a furrow, and all this as a mere prelude for an after amusement to all the ancient tribe of harrows, scufflers, rollers, and clod crushers, to do supplementally the real work of cultivation, it reminds one of "the house that Jack built." One can hardly blame the iron ribs of any respectable boiler for bursting at the first pull at a task so utterly at variance with every known law of mechanical advancement, so offensive to the economics, I had almost said the very ethics of the steam engine.

I trust I may be forgiven for so boldly speaking; but I am sorry to think of one useful shilling being thrown away in the attempt, unprofitable, even if successful, of harnessing steam with horse harness, to do horse work in a horse's way; the implement itself, whose wretched work it is put to accomplish, being a tool with the sentence of death written upon it, (be it as ancient as it may,) for its tyranny to the subsoil, which bears the whole burden and injury of its laborious blundering path.

I say the plow has sentence of death written upon it, *because it is essentially imperfect*. What it does is little towards the work of cultivation; but that little is tainted by a radical imperfection—damage to the subsoil, which is bruised and hardened by the share, in an exact ratio with the weight of soil lifted, *plus* that of the

force required to effect the cleavage, and the weight of the instrument itself. Were there no other reason for saying it than this, this alone would entitle the philosophic machinist to say, and see, that the plow was never meant to be immortal. The mere invention of the *sub-soiler* is a standing commentary on the mischief done by the plow.

Why then should we struggle for its survival under the new dynasty of steam? The true object is not to perpetuate, but as soon as possible, to get rid of it. Why poke an instrument seven or eight inches under the clod, to tear it up in a lump by main force, for *other instruments to act upon*, toiling and sweating and treading it down again, in ponderous attempts at cultivation wholesale—when by simple *abrasion of the surface* by a revolving-toothed instrument, with a span as broad as the hay-tedding machine, or Crosskill's clod crusher, you can perform the *complete work of comminution* in the most light, compendious, and perfect detail?

Imagine such an instrument, (*not rolling on the ground*), performing *independent revolutions behind* its locomotive, cutting its way down by surface abrasion, into a semicircular trench about a foot and a half wide, throwing back the pulverised soil (just as it flies back from the feet of a dog scratching at a rabbit hole); then imagine the locomotive moving forward on the hard ground with a slow and equable mechanical motion, the revolver behind, with its cutting points, (case hardened,) playing upon the *edge, or land side* of the trench, as it advances, and capable of any adjustment to coarse or fine cutting, moving always *forward* and leaving behind perfectly granulated and precisely *inverted*, by its revolving action, a seed bed seven or eight inches deep, *never to be gone over again* by any after implement except the drill, which had much better follow at once, attached behind with a light brush harrow to cover the seed.

Why did steam reject the *pump handle* and the *oar*? Because in both the leverage is obtained by loss of labor and time, occurring during the back movement of the handle, a movement necessary to the manual, but not to the mechanical agent. For the same reason, whenever it is applied to till the earth, it will antiquate every instrument that *cultivates by traction*, because traction is not only unnecessary to cultivation, but is inherently mischievous on other grounds, apart from the clumsiness, inaccuracy, and incompleteness of the work it turns out.

But the stones! There is much fear express-

ed for the teeth of the circular cutting implement I have described, when they come in contact with stones. The objection would have been equally valid, at first sight, against the use of the plow or the scuffer. Let me see the instrument in use where there *are no stones*—(and there are plenty of broad acres in England of this class)—and it will not be long before it gets upon the others. If it cost five pounds an acre to clear them out, it must be done, and would in such case, well pay to do it. But the truth is, that the instrument itself suggests the kind of machine, which, with a little adaptation, (greater power and slower motion,) might perform this preliminary service at the least expense. If land is to be like a garden in one respect, I see no good reason why it should not in all. I do not think stones will stand long in the way of steam, nor be readily preferred to bread; if, *where there happen to be none*, a steam-driven cultivator can be brought to bear, which, after the simple and beautiful example of the *mole*, shall play out the long comedy of our present field cultivation in a *single act*, present a finely granulated seed bed by a single process, almost at the hour required, and trammel up the long summer fallow into the labor of a day, with an accuracy as perfect as the turning of a lathe, and an aëration, (and consequent oxygenation,) of the soil as diffusive and minute as that of a scattered mole heap, or the dust flying from a steam-saw bench.

Implement makers and mechanics would not be long in understanding all this, if they were not under the supposition, received at second hand by them, and therefore the more difficult to eradicate, that plowing is a necessary form of cultivation to be kept in view. Once let them be made fully to perceive that plowing is merely the first of a long series of *means* towards the accomplishment of a particular end, that end being the production of a *seed bed*, of suitable depth and texture, and with the soil as nearly as possible inverted in its bed—and I do not think they will be long setting the steam engine about its proper task, in the proper way. But their attention is distracted, at present, from the end to the means. They are taught to think that the plow is a *sine qua non*—that steam cultivation of necessity implies steam plowing, and they are led to give up the task in despair, because they are at fault upon a false scent.

We have many *rolling* implements employed in the field, but we have only one instance of a *revolving* implement. The clod crusher and the Norwegian harrow *roll*, the hay-tedding ma-

chine, (one of the best instruments ever invented,) *revolves*. I use the words arbitrarily, but the difference I allude to is very important. The first are liable to the evil of clogging; because they derive their axis motion *from the soil* as they pass over and *press upon* it. This action must not be confounded with that of a machine which *has its cause of revolution within itself*, independent, and acting *upon* the soil as a circular saw acts upon a board, or the paddle wheel of a steamer, upon the water. The teeth of a saw clear themselves, by the centrifugal motion they communicate to the particles they have detached from the substance they act upon. A circular cultivator, steam driven, will do the same, for I have proved it. It does so more effectually according to the speed, (of revolution,) and the state of moisture of the soil. This last incident is at it should be; for it is not desirable that a clay soil should be dealt with when in an improper state for cultivation; and one great advantage of such an instrument as I point to would be that it would so greatly enlarge the choice of a suitable period, by its compendious accomplishment of the whole work of culture.

To illustrate still further the subject of steam plowing, we append from a late English paper, a description of a new arrangement with steam plows. We look, however, upon all these experiments, rather with the *wish* than the *hope*, that anything hitherto attempted will prove effectual for accomplishing the object.

The engine moves across the centre of the field on a light, portable railway. The plows advance and recede on either side of the railway, at right angles to it.

The plows employed consist of four ordinary and four subsoil plows, fixed in a frame. They are directed by a person standing upon a small platform.

Two such plows, one on either side the railway, alternately advance and recede; the advancing plow working, and the other idle until it regains its proper position for plowing the next four furrows. On the completion of the four furrows both ways, the engine and side frame advance each three feet.

The plows are attached to an endless chain, one hundred and fifty yards in length. They can be detached at pleasure, or shifted from one side of the chain to the other. They travel at the rate of *five miles an hour*. Provision is made in case they strike against any impediment.

Arrangements are made to suit irregularly-shaped fields and to increase or diminish the number of plows, if necessary.

In the present state of things, it is difficult to

form a correct estimate of the value of the invention in a commercial point of view. I will only say that a machine of the power, and with the arrangement described, would perform the work usually done by *sixteen* plows, driven by as many men, and drawn by thirty-two horses. Requiring itself the attendance of eight men, and a horse to draw the water for the engine, it would thus save the labor of thirty-two horses and eight men. Against this must be set an expense of five shillings a-day for coals.

LETTER FROM VIRGINIA.

I HAVE contemplated writing you for some time; but a farmer upon a new place has but little spare time to devote to letter writing. I say *new place*, because to me it is new, although it was in cultivation perhaps a hundred years ago. It is also new in another sense, because everything had to be created anew, except the dwelling, almost as much as though I had located on the western prairies, or the wild woods of the mountains.

The land now occupied by myself and two or three neighbors whom I induced to emigrate with me from New York, was once a fertile and very profitably productive tobacco plantation. Allow me to tell you what it was some years ago and what it is now. It was then a wild and barren-looking waste. Abandoned by the owner many years ago, the fences had all gone to ruin, leaving scarcely rails enough to mark their former location; the land nearly all grown up to old-field pines, persimon, sassafras, and broom straw. All the buildings in ruins except the dwelling, and that nearly so; the whole presenting a scene that required strong faith in the purchaser that his abilities would be sufficient to reclaim such an unpromising looking ruin. Of the soil, all concurred in assuring me that it was worn out and worthless; that it would not produce enough to keep the hands alive who planted it, and the only thing that could be done with it was to let it alone and grow up; in time, it might pay for clearing, &c. I found, on examination, the soil was a sandy loam with a subsoil of red clay; that it in all its former cultivation, had never been plowed with a stronger team than one horse, and of course a very light plow in a very shallow furrow which only stirred the surface. This determined me to risk a purchase of land esteemed almost worthless; land that would hardly support a single sheep to the acre. Of course, I could not manure it, and had to look for fertility in the soil or rather below what was termed such. This I did with one of your No. 19 plows, set as deep as four

good stout Virginia Yankeised oxen could pull it. I would have employed a larger plow than that, but did not like to risk it at first, and besides, I could not afford a heavier team. All who saw my first attempt, even the negroes, were sure I was crazy. The result proved I was not quite so. I cradled the best crop of wheat in all that section of country, and had my land covered with as luxuriant a crop of clover the next season as I could wish. Upon this, I sowed a bushel of plaster to the acre, the effect of which, if possible, was still more astonishing to those who came to look, than was the fact that fifteen bushels of wheat to the acre had grown upon that old broom-straw field.

I have since continued steadily every year to add a new field to my cultivation, and by means of lime, ashes, plaster, clover, and manure that my increased crops have enabled me to make, I have rendered a barren waste a fertile spot; supporting herds of cattle and flocks of sheep, and affording sustenance and happiness for many human beings. My great engine of improvement has been the plow—such a one as never was used upon this land before, with which I have turned up the red clay, and in some cases used the subsoil plow, so as to get a mellow tilth from ten to fifteen inches deep.

Since I first settled here, there have been large accessions to our then small society of northern farmers, and some of the farms, so far as regards the appearance of buildings, particularly barns, and clover fields, with cattle and sheep, grazing, have all the appearance of New England or New York. The change is very great. Sheep are driven here in considerable numbers from New York; and cattle from the valley of Virginia and Kentucky and fatten upon our rich clover fields. If some of the breeders of Durhams and Devons, at the north, would send us a few of their cattle to mix with ours, it might add much to improvement in stock. Why should we look to Kentucky for our cattle, when it is well known that we can breed as good ones in Virginia, by the aid of such as I saw exhibited at your late fair, as can be bred anywhere in the United States? We now have as good pastures as could be desired and very little winter. The market of Washington City is not only good for beef, mutton, butter, and flour, but everything that can be grown for the sustenance of man or beast. We now have schools and churches convenient, and there is a vast improvement in roads going on every year, and the day is not far distant when this region of poor, old, worn-out, despised Virginia plantations, will be looked upon as one of the

most flourishing agricultural regions in the country.

I shall perhaps write you again upon this interesting subject of improving old, worn-out lands, of which all the southern states have an abundance. As I am not ambitious of notoriety, please to leave my name blank.

Nov. 9th, 1850.

STRING HALT—IS THERE ANY REMEDY?

NOTWITHSTANDING all that has been said and written on this subject, we have never met with a remedy; and we doubt very much whether it is in the power of veterinary practice to cure it. The only thing, then, is to treat the horse thus afflicted kindly, and have patience with him when he first starts; for, after travelling a little distance and getting warm, the nerves seem to be relaxed, and ordinarily he does not then mind it.

So far as our experience goes, we have found string halt seemingly unaccompanied with pain; and it is not therefore to be so much regarded as some other diseases. Nor where it exists in a moderate degree, do we think it affects either the strength or speed of the horse. A little care only is necessary that he does not get cold in his limbs, as this aggravates the disease. We have also found that it was less apparent in warm weather, particularly when the horse was running in pasture.

It is often asked what is the cause of string halt? Professor Spooner seems to be of opinion that it is a morbid affection of the sciatic (hip) nerve; for he asserts that he had never dissected a single case in which he had not found disease of this nerve, which mainly contributes to supply the hind extremities with sensation, and the power of voluntary motion. Others think that string halt comes in consequence of the muscles of the thigh being injuriously affected; but we have never heard of a case of dissection in which it was shown that string halt had produced any change in the muscles; we are therefore inclined to agree with Professor Spooner, that it arises from some injury to the hip nerves. Owners of horses affected with string halt, who would consult their own interest and avoid tormenting the poor animals, will refuse all the quack nostrums offered to alleviate this hitherto incurable disease.

CHEAP BLACKING FOR HARNESSES.—Melt two ounces of mutton suit with six ounces of bees' wax; add six ounces of sugar candy, two ounces of soft soaps, and one ounce of powdered indigo; melt and mix well, and add a gill of turpentine. Lay it on with a sponge, and polish with a brush.

SALT FOR CATTLE AND SHEEP.

THE following article is extracted from "Travels in France," published more than fifty years ago; but none the worse for its antiquity. The question is yet a mooted one, how far salting stock is conducive to their health, or necessary to promote their growth, or dispose them to take on fat. If any of our readers have any arguments in opposition to the doctrine of the ancients in regard to salting stock, let us have them in as concise a form as practicable:—

One of the most singular practices in the eyes of an Englishman, that is to be met with abroad, in the management of sheep, is the regularity with which salt is everywhere given to their flocks, and also to cattle. The practice is of great antiquity. The ancients were in a regular practice of giving salt to sheep. Columella tells us, that if the pasture for this animal were ever so sweet, yet it would grow stale to them, if they had not salt given in wooden troughs. It appears, from an imposition established so long ago as 1462, in the Milanese, that the annual consumption of salt is reckoned at 28 pounds for each head of cattle. In France it is conjectured to amount to 50 pounds, and for sheep to 15 pounds, where the sale of it is free. The same author mentions it as a known fact, that cows give the more milk for it; sheep finer wool; and that all animals are kept by it in good health. In some of the articles of instruction to the deputies in the National Assembly, salt is considered as essential to the well being of cattle, indispensable to all beasts. M. d'Aubenton directs one pound every eight days to twenty sheep. In Spain it is as common as it is in Italy and France; a fanega of salt, or 100 pounds, is allowed for 100 sheep, by law; but they use 15 and 20 fanegas for 1,000 sheep. In a memoir on the Spanish flocks, by the late Mr. Collinson, the account is more particular and curious. 'The first thing the shepherd does when the flock returns from the south to its summer downs, is to give the sheep as much salt as they will eat. Every owner allows his flock, of 1,000 sheep, 25 *quintals* of salt, which the flock eats in about five months; they eat none in their journey, nor in their winter walks. It is believed that if they stinted their sheep of this quantity, it would weaken their constitutions and degrade their wool; the shepherd places 50 or 60 flat stones, at about five steps distance from each other; he strews salt upon each stone; he leads the flocks slowly through the stones, and every sheep eats to his liking. What is very remarkable is, that the sheep never eat a grain of salt, nor wish for it,

when they are feeding on land which lies on limestone; and as the shepherd must not suffer them to be too long without salt, he leads them to a spot of clayey soil; and, after a quarter of an hour's feeding them, they march back to the stones and devour the salt. So sensible are they of the difference, that if they meet with a spot of mixed soil, which often happens, they eat salt in proportion.' The practice is found equally in Germany; the late king of Prussia, by ordinance, expected his peasants to take two *mebzen*, (nine pounds,) for each milch cow, and one *metze* for every five milch sheep, and half as much for such as do not give milk; [a very sensible practice, that ought to be followed in this country.—Eds.] and in Bohemia the high price of salt is found very prejudicial to the flocks. The Hungarian peasants lay pieces of rock salt at the doors of their stables, cow houses, &c., for cattle and horses to lick. It is practised, also, in Poland. Throughout all North America, salt is given to cattle and horses once a-week. Paoletti, a practical Italian writer, orders one pound to each sheep in autumn, and another in spring. M. Carlier decides against it, but on very insufficient authority. M. Tesser unites with the common practice, by recommending it. This practice, which is unknown in England only, merits, I believe, much more attention than the English farmers are willing to give it, at least those with whom I have conversed upon this subject. I have tried it for two years past in my own flock; and though it is very difficult to pronounce the effect of such additions to their food, except after long and repeated experiments, I have, I think, reason to be satisfied, my sheep having been very healthy, and once or twice so, when my neighbors suffered losses.

FARMERS' CLUBS.

WE have often urged upon our country friends to form clubs for the discussion of matters in which they are particularly interested. The pleasures and advantages of these associations cannot be realised by those who have never tried them.

Mr. T. S. Gold, of Cream Hill, in Connecticut, writes us that last winter they had a club which met once a-week by appointment at the house of some member; taking care always to have the female members along with them, who usually occupied one room to discuss their own matters, while the lords occupied themselves in the discussions of the club in another.

One of the members acted as chairman or moderator, and called up every member in ro-

tation to speak to the question under discussion, or give some information about his peculiar manner of fencing, or keeping his stock or growing his crops, with the manner of plowing, manuring, &c.

In this way, much useful information is brought to light and many very pleasant evenings passed off during the long winter months. Of course, a few nuts, apples, and cakes, and sometimes a cup of tea add to the enjoyment.

We commend a great many other neighborhoods to follow the same course during the present winter, and increase not only their agricultural knowledge, but gather a stimulus to improve that which they already possess.

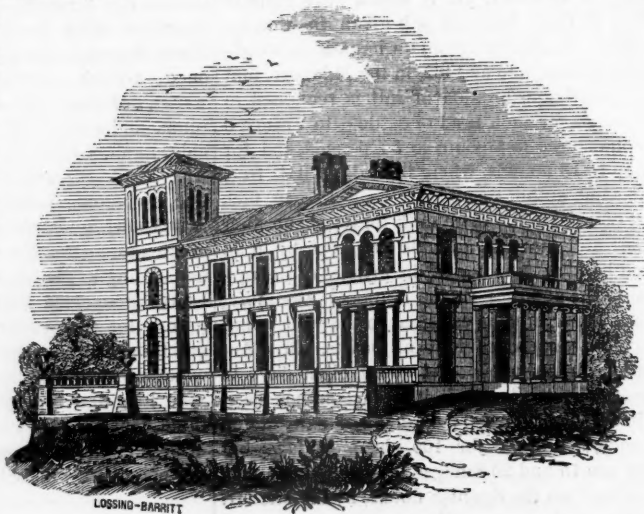
Short, pithy, reports of such discussions would be interesting to the readers of agricultural papers.

A NORTHERN COUNTRY HOUSE.

From an elegant, and somewhat expensive work entitled the "Palace of Architecture," we transfer to our columns the accompanying design of an Italian villa, in a modified style, which, for certain localities and pictorial effect, appears to be well adapted to our northern climate, as well as to the habits of our people, and would form an appropriate mansion for a wealthy gentleman in the country.

Taking its arrangement from its owner, its external features from modern Italy, and its complexion from Greece, it may be thus described in its own words: "I occupy an elevated site, having pleasing prospects to the south and east, with the opportunity, by some additional elevation, of commanding a panoramic view of the domain in which I am situated. Hence, the position of my two terraced fronts, and the existence of my prospect tower, at their angle of union. My roof is low, because I am frequently subject to violent winds; and it extends considerably beyond the face of my walls, to protect them from our heavy falling rains. To avoid the retention of collected snow, I am without parapets. My windows are sashes, sliding up and down, because there is great difficulty in making hinged casements, exclude

the damp and cold. My bed-chamber windows are preserved from much wet and noise by the projecting eaves of my roof. My lower windows are protected by their own cornices. Except to my entrance portico, I have no external columns; because it is impertinent in any house to exhibit them as mere ornaments, and I have no use for them elsewhere. They here support a flat roof, serving as a shelter for the carriage at my door and also as a balcony connected with 'my lady's chamber.' My terraces originate in the peculiar form of the surrounding ground. The required shape and arrangement of my rooms, prevented uniformity in my east and south fronts respectively; but, in the angular view, which includes these fronts, is seen a uniform composition, of which my tower forms the centre. My entrance front, you well observe, is perfectly regular in design. Thus I pride myself on the



A NORTHERN COUNTRY HOUSE.—FIG. 3.

variety of effects, which successively present themselves, as you walk around me.

"As to my style, it is not pointed Gothic, because the necessary form and construction of my roof and windows obstinately decline it. It is not Roman, because all my details are Greek. It is not Athenian, because I have arch-headed openings, and a Tuscan roof. What am I, then, but an English, [or an American,] mansion, adapted to any locality, and to the climate and customs of my country?"

BEAN STRAW should not be wasted. It is good feed for sheep, and they are very fond of it.

Pea straw, if cut green and well cured, is good feed for all kinds of stock.

WEST-HIGHLAND CATTLE.

THE West-Highland or Kyloe breed of cattle, has been known to exist in the Hebrides, and Highlands of Scotland, from time immemorial, and is undoubtedly one of the most ancient of Great Britain. They are of medium size and

the best for breeding, and by keeping them down to a medium size. All other methods would have resulted in disappointment; for if they were refined too much, they would be too delicate for their rough, exposed climate; and if made larger, they could not thrive on the

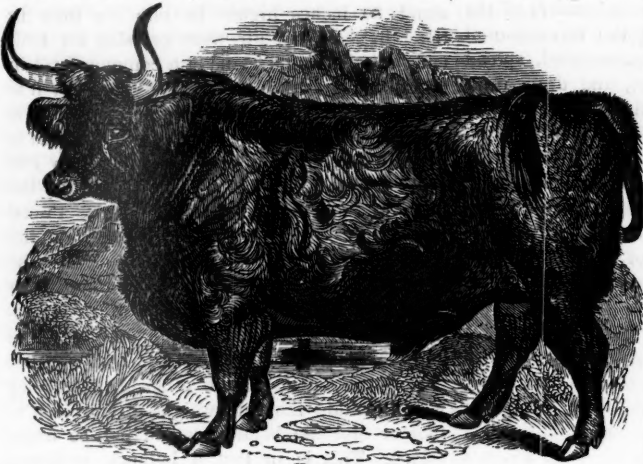


FIG. 4.

tolerably fine in their points; but their great superiority consists in laying on an uncommon quantity of meat, in proportion to their size, all along the crop, back, and loins. This meat is of a superior quality; hence their great value to the butcher and consumer. They are un-

fore going to the butcher. Their meat bears the highest price in the London market. It would be an excellent breed to introduce on the hill and mountain pastures of our northern states. The annexed cuts are kindly loaned us from Mr. Saxton's forthcoming edition of Youatt & Martin's history of British cattle.

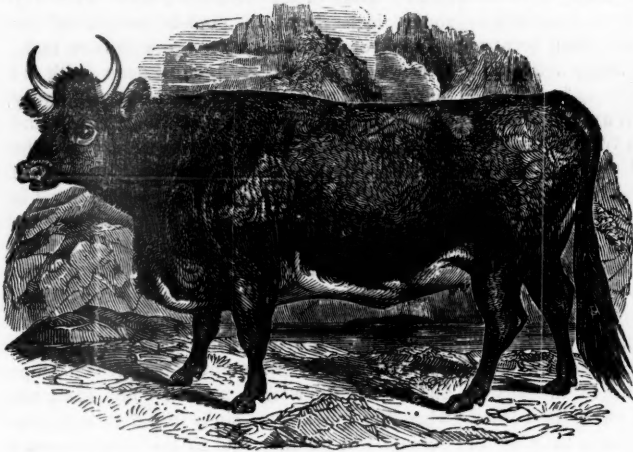


FIG. 5.

questionably one of the most profitable breeds of cattle known; for they are so hardy that they can be reared where others could scarcely exist.

Attempts have been made to improve the Kyloes, simply by selections from themselves, of

for it. The reason which the owner gave me for refusing the offer, was, that his hyacinth was known to all the amateurs in Europe, and that he sold the bulbs every year, for more than the interest of five hundred guineas."

poor, short pastures of the Hebrides and Highlands.

Their hair grows very long during the winter, and proves an excellent protection for them in their exposed situation. The colors of this breed are generally pure black, red, or dun; a singularity common to no other breed of which we are cognisant. The Kyloes are usually bought up in large droves, at two or three years old, and driven into the south of Scotland and England; and there fed a year or two be-

THE PRICE OF A FLOWER.

—M. Dutens, a traveller in Holland, (we cannot ascertain the year,) says: "I was witness to a circumstance I could not otherwise have believed, respecting the price of flowers in Holland. I saw 475 guineas offered and refused for a hyacinth. It was, to be sure, the most charming flower that ever was seen. It belonged to a florist, at Hague, and another florist offered this price

OATS AN EXHAUSTING CROP.

VON THAER calculates the exhaustion of a soil upon an average at 25 per cent.; that is, each succeeding crop will be one fourth less than the preceding one, unless the loss is repaired by rest, pasture, summer fallow, or manure.

All culmiferous crops are exhausters of the soil, particularly so during the formation of their seeds. They are fibrous-rooted, spread themselves near the surface, and draw their nourishment principally from the upper stratum of soil.

It is apparent that we cannot take two or more such crops from the same field, in successive seasons, without a manifest falling off in the product. The reason of this, is, nature has provided for each species of plant, a specific food, suited to its organisation and wants.

VILLAGE LECTURES.—No. 3.

The Soil and the Air Continued.—Let me furnish other proofs of the fact that most of the bulky part of our plants is derived from the air. I have already proved it by showing that there is no other source except the air from which a plant can get its combustible part, and there are two other ways in which I can prove it—I can show you that the air is heavy enough to render it very likely that it contains enough of substance to grow plants of, and I can show you that it actually does contain the very things on which plants feed.

Why has the soil always been supposed to furnish the substance of plants? Is it because there is enough of it—good heavy stuff, that you might suppose able to build up heavy substantial plants and trees? Why the air surrounding the earth is at least twenty times as heavy as all the surface soil surrounding the earth—even supposing it to be on the average twelve inches deep? Though it is so easily moved through, the air is heavy enough, I can tell you. There are 15 pounds' weight of it resting on every square inch of ground. The whole atmosphere of the globe weighs as much as a ball of lead would weigh, though it were sixty miles in diameter. You can judge in some measure of the weight of the air by the way in which it will stretch a piece of India rubber extended over an open jar fitted to the plate of an air pump. If it were held at the four corners, and weights piled upon it, they would stretch it, and if heavy enough they would break it; but if it rested on a stool they could not. Just so the air above it cannot stretch it now, because it rests on the air beneath; but remove the stool and the weights will stretch it;

remove the air beneath, as can be done by this pump, and the air above will stretch it and burst through it.

But we can actually weigh the air. Take a bent tube, three feet long, filled with quicksilver, and invert it. Why does the liquid metal stand 30 inches higher in one leg than in the other. If the air were pressing on both ends alike, it would stand at a common level in both branches of the tube; the reason why it is standing so high here must be because there is something pressing on the one surface which is not pressing on the other—the reason why it is standing so high in the one side is because the air is pressing only the other. The fact must be that the weight of the air pressing on the surface of the metal in the one leg of the tube is just the same as the weight of quicksilver above that level in the other. The air is supposed to be forty-five miles high, and I say that supposing this tube extended forty-five miles high to the outside of the atmosphere, this leg would contain the same weight of stuff in it as that, or else the balance would not be maintained. This is in fact a balance, weighing whatever is put into one leg of the tube by the height to which it will raise the quicksilver in the other; the air pressing here raises the quicksilver there to a height of 30 inches; that is, the weight of air pressing on every square inch of the earth's surface is the same as if 30 inches deep of quicksilver rested on every square inch. Now, 15 pounds' weight of the quicksilver would rest on every square inch, if it were covered 30 inches deep with it; therefore, 15 pounds of air rest on every square inch of the earth's surface. If I let the air in on this end again, you will see that the quicksilver, (now bearing an equal weight of air on both sides,) will regain the same level in each side; so that this is in fact a measure of the weight of the air.

When made in a more portable and elegant form, it is called a *barometer*, from two Greek words which signify a measure of weight; and the height of the quicksilver in the tube indicates the weight of the air, which presses it up; and as dry air weighs heavier than damp air, when the quicksilver sinks in the tube we anticipate wet weather, and so this tube becomes a weather glass, and when furnished with a float on the surface of the quicksilver, it pulls round an index figure on a dial plate, and points to rain, fair, stormy, and so on; and this is the principle on which your weather glasses act. Well then we have just the same weight of air around the globe as if the surface of it

were covered thirty inches deep with quicksilver, and that is as heavy as twelve to twenty feet of soil would be; and if you were never astonished at the eight or ten inches of soil being able to grow repeated crops of grass or corn or trees without wasting under the process, surely you ought not to be astonished at the air, which is twelve or twenty times as heavy, being able to do the same thing. The leaves of the tree do not indeed stretch through the whole air in search of food, as their roots do through the soil; but then the winds are continually mixing the particles of air up and bringing fresh ones to be fed upon by the foliage of the plants and the trees, so that ought to be no hindrance in the way of our believing what is really the truth, namely, that plants get everything in them which will burn up from the air, and only their incombustible part—their ashes, which will not burn away from the soil.

But now I will prove to you that the air really does contain, in the midst of it, the very particles of which wood is composed. I have here a piece of wood dried at a red heat, under circumstances which hindered it from taking fire; it is a piece of charcoal in fact, which is nearly all that remains of the wood after the water is driven out of it. Now, I say that the tree got this charcoal from the air; first, because it could not get it from the soil, which has not anything near enough of the stuff in it, and the air is the only other thing which the plant could get at to obtain it from.

The argument merely proves that all the carbon in vegetables came *originally* from the air. It does not determine what portion of any particular plant came from the air, nor what from the soil. In the early stages of its growth, the plant derives a good deal of its substance from the soil, and some of even the carbonic acid of the air it may absorb through its roots. To supply the land with organic matter, in the art of cultivation, it is necessary, not merely for the mechanical effort thus exerted on its texture, but for its use as food in supplying the plant with a portion of its organic part.

Secondly, because the air is heavy enough—has matter enough in it to supply many such trees or whole forests, if they were wanted, from it—for it is many times heavier than the soil from which people generally think that such trees and plants do come. And, thirdly, I believe the tree gets its charcoal from the air, because the air is not only heavy enough, but it contains the right things, too; it contains the

charcoal particles of this black substance present in it, as I shall prove in my next lecture.

THE GREAT POULTRY SHOW AT BOSTON.

I LEFT New York, last evening, on the Vanderbilt—a very excellent boat—and a lovely moonlight passage I had through the sound; arriving at Stonington, at 12½, and at Boston, at 4½ A. M., over one of the best railroads in the Union, at a speed almost fast enough to satisfy Yankee go-ahead-i-tive-ness. Whether this is the best of all the routes between New York and Boston, I am not prepared to say; but I will say it is a good one, and as worthy of patronage as any other.

The first sound that greeted my ears, the morning of my arrival at Boston, was one united, concentrated, tremendous cock-a-doodle-doo; uprising in the clear morning air from some two thousand throats; with which was mixed a fair proportion of gander gabble and turkey gobble; with an occasional interlude, applicable to the occasion, of quack! quack!! quack!!! Whether there were any real quacks present I do not know. The din of hackmen and hotel runners, for once, was put to silence. "For a noise went up to heaven as of many cocks crowing." And that noise in imagination, is still ringing in my ears; for I have been all day wandering among the coops, trying to learn what magic influence—what *morus-multicaulis* miracle of speculation hath so wrought upon the sober character of this Yankee population; as thus to gather together such thousands of biped beings, feathered and featherless, in one great crowing match of all New England.

The exhibition is held in the public garden, west of the Common, under a mammoth tent, which covers 23,716 superficial feet—over half an acre. This is filled with coops, arranged in rows and tiers, containing an uncounted number of all manner of domestic fowls, variously estimated from 6,000 to 16,000. From the notes which I saw of one gentleman who undertook to enumerate the multitude, I am satisfied the smallest number comes nearest the truth. I am also satisfied that even this will be looked upon as an exaggeration, by those who were not present and who never felt the fever; because they will not be able to conceive how dreadfully that disease must rage through a community, to induce them to come together to the number of *three hundred and thirty-eight exhibitors*, with 6,000 head of cocks and hens, ducks and drakes, gobblers, ganders, geese, and Guinea fowls, in all sorts of coops and cages;

some of which could not have cost less than fifty dollars a piece, and were probably got up especially for this occasion.

The following memorandum of the coops and kinds exhibited by Messrs. Pierce & Osborn, of Danvers, Massachusetts, will give your readers a pretty fair idea of the various sorts kept by those who make a business of *chicken breeding*, together with the regular "trade prices." To commence with the tallest kind:-

Coop No. 1, contains Shanghaes. Price, per pair, \$4, of three varieties. Parsons, Perley & Forbes' importation.

No. 2, Black Spanish,	\$5 per pair.
" 3, Guilderland,	3 "
" 4, Rumpless,	3 "
" 5, Dominique,	3 "
" 6, Black Poland,	3 "
" 7, White, do.	3 "
" 8, Golden, do.	3 "
" 9, Golden Hamburg,	5 "
" 10, Spangled,	5 "
" 11, Singapore,	3 "
" 12, Silver pheasant, top-knot fowls,	5 "
" 13, Bolton greys,	3 "
" 14, Brown Dorkings,	4 "
" 15, White, "	4 "
" 16, Yankee game,	5 "
" 17, Java, "	5 to 10 "
" 18, Sicilian fowls,	3 "
" 19, Jersey Blues,	3 "
" 20, Plymouth Rocks,	4 "
" 21, Fawn-colored Dorkings,	4 "
" 22, Chittaprats,	3 "
" 23, Royal Cochins-China,	6 "
" 24, Manilla Bantams,	3 "
" 25, Sebright, "	3 "
" 26, Cuba, "	3 "
" 27, White ducks,	2 "
" 28, Spanish, do.	5 "

This list only embraces a part of the varieties of one exhibitor. The yards and hen house, (which is an old conservatory,) of these gentlemen, covers about three acres of ground, upon which they keep an average stock of 1,000 head, and some thirty different kinds. During the breeding season, each variety is kept in separate apartments; the cocks being introduced to hens for the purpose of "judicious crossing," with as much care as would be shown to a Durham bull, or an English race horse. The feed is principally corn, costing 75 cts. a bushel, and is kept constantly before them in feeding hoppers, which are filled once a fortnight. Oats, barley, potatoes, dough, and meat are fed occasionally;

water every day. Cost of food consumed will average about two cents a week per head; and it requires the labor of one hand most of the time to look after the establishment. During the moulting season, all except the game cocks, are turned out to grass together. By keeping the house warm through the winter, with plenty of food, they get a supply eggs, which then sell for high prices in the city. In the spring, they bring much higher rates for the purpose of raising stock; not however to be eaten, as will readily be seen by the enormous sums they sell for, to others affected with the same fever. For be it distinctly understood, the above are not "fancy prices," nor such as an individual would generally have to pay for a single pair; nor such as have been *realised* during the day. I saw one cock *change hands* at thirty dollars, and a hen of the same Shang-high sort, at fifteen—the owner refusing twenty-five dollars for a pair, and I was credibly informed of another *transaction* at fifty dollars for a cock and hen; which I understand is not an unusual price among the *fancy*.

The owner of one of this giraffe breed, seeing an old farmer eyeing a remarkably tall specimen that was stretching his neck away up into the upper regions of a three-story coop, inquired of him if he would like to make a purchase; observing how much it would improve his old stock of poultry.

"Wal, I guess not; I live in a *one-story* house."

Why? What has that to do with the matter?

"Wal you see, I keep my seed corn up garret, and I don't want to lose it."

No. Well you don't want to keep your fowls up garret do you?

"Oh! Bless your soul no!"

What then? I don't see your objection."

"Don't see! No Sir, can't that ternal great long-legged rooster stand on the ground and eat corn out of the garret window? You don't catch me with such a *beast* on my farm. *Improve my poultry. Ha?* Why, I wouldn't cross that critter upon anything except a she jackass; and a darnation mean one at that. Faith! The hens look as though they were of that breed—I'm sure the owners are—they're all stern;" and with that sage observation he walked off with the air of a man whose dignity had been highly offended, with the idea that a gentleman of his appearance of good sense, should be offered a Shanghae cock to *improve* his stock of poultry; which, as I afterwards learned of him, consisted of some choice Jersey blues, a few brown Dorkings, and a good stock of yellow-legged Dominiques; also a few Bantams, to please the chil-

dren. "Which, says he, "I would not give for the whole tentful of long-legged monstrosities, like these ugly brutes. What if they do weigh 12 or 15 lbs. a piece? They cost more than turkeys of the same weight, and are not half so good. Look into the Boston markets, Sir! Do you see any good poultry? If you do, you will find such prices, that none but the wealthy can afford to buy; for of all this great show, not a single owner is engaged in the business of raising poultry to supply the market. And the reason is very plain—it wont pay. Poultry can only be raised in a small way, as I raise it upon my farm, where the cost is not felt. When kept up and fed, every hen costs a dollar a year; and the eggs will just about pay for the trouble of taking care of them and not much more. So you see, just as soon as these humbug speculating prices go down, down goes the hen business about Boston, in spite of all this crowing and cackling of a parcel of old cocks and young biddies."

I was gratified to find that the long rough-looking homespun check woolen frock, which had perhaps deceived the rooster man into the idea that the owner was a flat, was not a cloak to hide a multitude of faults, but that it covered a form possessed of sound judgment and good sense; such as are often met with in similar working garbs in New England.

I find I cannot get through this great show in one letter, so good night. SOLON ROBINSON.

Boston, November 13th, 1850.

REVIEW OF THE NOVEMBER AND DECEMBER NUMBERS OF THE AGRICULTURIST.

OWING to a pressure of occupations, such as every farmer feels at this busy season, gathering in the late crops and preparing for winter, I neglected to furnish you a review of the November number; and so I have taken both months in connection, (the latter of which came to hand by this day's mail), and as I am in a terrible hurry, only glance at some of the articles which strike me as most worthy of comment, beginning with November; the first article of which treats of

Espaliers.—Truth every word of it, as I know by my own experience. The sooner gentlemen give them up for standard trees, the better it will be for their pockets and taste. Fruit grown upon espaliers, is like the Indian gun—"cost more than he comes to."

Cemetery of the Evergreens—Greenwood Cemetery.—I have put both of these articles under one head, though you have placed them wide apart in your pages. Some may think they are not

appropriate to a farmer's journal, but with all such hypercritics, I beg leave to differ; as they afford fine study for landscape gardening, if nothing else. But I hold that such model burial places will exert a great and highly beneficial influence over our rural population. The tendency will be to refine and elevate their taste and feelings. I always felt holier and happier, after a visit to Greenwood, than I did before, and I believe every farmer in the land would; and what is more, return to his home, determined henceforth to pay more attention and respect to the resting place of the dead of his own neighborhood.

Jefferson-County Dairy Farming.—And so Mr. Eames' cows nearly pay for themselves in milk, butter, and cheese, every year, do they friend Robinson? Well, the public ought to thank you for reporting it, if this is a *fact*. I am not inclined to dispute it; for I know a few cows here in my own happy valley, which do the same. It goes to show that a good cow is far more profitable than a poor one. I advise my brother farmers to pay more attention to quality hereafter, than they have been in the habit of doing.

Farm of Mr. Buckalew.—This is certainly a most surprising statement, and a few years ago, it would not have been believed that such results could have been brought about on such poor land. I can well recollect travelling over this part of the state before the days of railroads, and then I would not have thanked you for a fee simple of a thousand acres of such land; and the more a person had of it the poorer I should have considered him. But, see now, what intelligent enterprise can do. I shall be tempted next year to *happen in* on Mr. B., during peach time. I suppose out of his fifty-thousand-bushel crop, he would not mind my eating up a basket or two [Not in the least. He would give you a hearty welcome. We never made a visit where we felt more so. No doubt he would be delighted to see you. Captain, give us a call and we will go over with you next peach time. And you may as well bring one or two of the girls with you, by way of making the jaunt more agreeable.—Eds.]

Garden and Fire Engines.—Every farmer should have one of these valuable machines. With the one I got at your agricultural warehouse, the last time I was in New York, two men can throw water clear over my old gambrel-roofed house. They would be very useful in putting out a fire just commenced, as well as to water lawns and gardens, and wash the windows, for which purposes we use ours.

Village Lectures.—Go on; give us plenty of such excellent reading. Your selections from European journals are always valuable. How is it, that these agricultural papers rank so much higher than our own—more elevated in tone and character of composition—full of science and instruction? By the bye, you need not be afraid to give us a little *scientific agriculture* now and then, for the boys are beginning to learn this at school. As for their fathers, they never will learn, for they never read; so you will lose no subscribers by the operation, but in my opinion gain many [We had anticipated Reviewer, and determined upon this course before his article came to hand.—Ebs.]

The Hog.—Verily the Doctor has given us a blast indeed! I suppose what he says is true enough, for he has scripture for most of it. He has made one convert, and that is myself, for I have now sent all my pigs to the butcher, and there is an end of one torment. I never fancied the unclean beast at best, and now I trust I have done with him forever. I find there is no economy in keeping pigs, in our section of Old Connecticut; for my cows and calves eat greedily all my house slops, sour milk, and vegetables we formerly gave the pigs; and the dog and chickens pick all the bones. The horrid diseases or rather disease the Doctor speaks of, is true enough. It has often originated among the lower classes of the southwest, whose principle food the year round is hog and hommony. My advice is, avoid pork and fat meat, gravy and lard, as much as possible; more particularly in the hot months of summer. From the pigs, I will make a long stretch to windward and heave to among the birds in the

DECEMBER NUMBER.

What are Birds Good for?—Turn back to this article—read and reflect? and ye shall learn why these good gifts of God were given. "One never tires of listening to such sound doctrines." That is true. I would make it a part of the education of every boy to whom it is desirable to give an agricultural education, that he should be taught what birds are good for.

Shorthorn Cattle.—Here is a correspondent bearing down upon country gentlemen, with all sails set; yet I do not see from his own showing, that he is a single rope yarn better than they are, in the way of improvement nor liberality. Take care my friend that the recoil of your gun don't knock you over. First remove the beam out of thine own eye. However, I do think that country gentlemen, and for that matter, *country farmers*, too, one of these days, will

be quite as much ashamed of having a poor breed of cows or sheep on their premises, as a poor horse, poor carriage, or poor house. In my poor opinion, all hands need piping up from forecastle to cabin; and what is more, I hope they will get it. So bear ahead here with your editorial hardspike, and rope's end!

How to Mismanage a Garden.—Upon my word, I always thought the public knew enough about *mismanagement*, without any instruction. But "Live and learn," is a good old proverb.

Village Lectures.—These two, one in November, containing a series of propositions, and one in December, giving answers, afford much valuable information, although somewhat carelessly written. I hope you will give us a few more of the same sort, so that everybody and his wife, and certainly everybody's children will read and profit by it.

The proposition that the substance of wheat, butter, cheese, and woody fibre comes from the atmosphere, I shall not controvert; but I should like to see this writer growing wheat upon land destitute of the phosphates; or making cheese upon soil deficient in *casein*, like that of some districts of England, which failed producing grass a few years ago, until the exhausted principle was restored by ample dressings of bone meal.

Maryland Farming.—Cows *may* be milked up to the day of calving, but is it policy? It is the opinion of breeders in this country and England, that they should go dry one month before calving, at least; else the foetus suffers, and the qualities of the stock deteriorate in the first or second generation.

The Philosophy of Human Life.—The advice of Mr. Tomlinson, though good, is not suited to all latitudes nor all constitutions; because there is a higher governing power. *Half meals* may do for some. I have always found my own health promoted by whole meals; and if the food is mostly vegetable, or plain cooked, not overdone meats, particularly beef and mutton, belching and indigestion never ensue. I eat as much of such food as the appetite naturally craves; without which I feel uncomfortable, uneasy, and unfitted to perform my laborious duties. Without such diet, I could not withstand the rigors and variations of some sixty degrees of latitude, and still maintain my robust health. I am as much opposed to stuffing as Mr. Tomlinson; I am equally opposed to starving, man or beast.

Ohio Cattle Show.—Very good, Mr. Visitor; I hope the sketches you promise will be still more interesting. Ohio is a great state—some Down-Easters know what made it so—and her spirited stock breeders and improving farmers

have made a good beginning with this first state show of theirs; excelling that of New York, nine years ago. A few states are well under way upon the voyage of improvement, and others quietly enjoying the sleep of the sluggard, which still rests upon them with all the force it ever has upon that ancient race. Shall we wait the termination of the nap, or shall we try to rouse them with the news of a new election—the only sound that will wake them? Suppose we nominate for governor, the Honorable Mr. Improvement, of Shorthorn Hall; the elegant Mr. Devonshire, of Oxdale Plantation, will make a wide-awake secretary; and Old Squire Cotswold, of Fat-mutton Hollow, a real substantial treasurer. Old Rip will wake at last!

Tool Shop for Farmers.—"Every farmer ought to possess a variety of tools, such as are needed in repairing farming implements." Very true, and every farmer ought to possess the implements; but not one half of them do; and not one in ten possess the tool shop recommended. If they ever should, they will desire also to possess the

Wood-sawing Machine for Cutting Fuel, which you have represented, and ought to have given the price, and whether it could be purchased at your warehouse.

Pruning and Budding Knives.—These are not altogether for use of boys—unfortunately, I have none—for daughter Mary, now leaning upon father's shoulder says she will try her hand next season, at budding and grafting, if I will get a set. So you may put them in the horticultural toolchest I ordered last week.

Cattle Shows and Fairs.—How much these are on the increase! The idea of trying to have them held one after another and interchanging visits is a good one.

Education of Farmers.—A short paragraph, full of inconsistencies. Farmers do not "often complain of want of education in themselves"—they think they know enough, and that is the reason why they do not employ their leisure time in mental improvement.

Chemistry for Girls.—Why not for men and boys and women, too? It is a kind of information, that would not be greatly to their disadvantage. The article in question has given no little information to your

REVIEWER.

MOULDY BEANS may be restored and made fit for use, if not very bad, by rinsing well in hot water and carefully drying. Mouldy corn or peas may be treated in the same way.

A DAY IN WESTCHESTER COUNTY.

THROUGH the politeness of the treasurer of the Harlem Railroad, I was enabled, or rather induced to, make a little excursion upon this great city artery—a proper term, for it keeps up the circulation between town and country—and take a few notes for the benefit of my readers. The cars start from the City Hall, several times a-day and are taken by horses through the thickly-settled streets, occupying about half an hour; then by steam at a very moderate rate, owing to the numerous stoppages at a great number of growing villages along the line of this road. I noticed the singular fact, that these country residences are mainly supplied with marketing from the city, instead of their own vicinity.

This road is well conducted, and of immense advantage to the country through which it is located. The freight upon milk, alone, this year, will exceed \$40,000. It was over \$5,000 in the month of July—some days \$200—Think of that, unimproving generation!

What would have thought the old settlers of '76—if they had been solemnly assured that the time would come to their children, when the matutinal milkmaid should send her rich product, warm from the cow, to the city, fifty miles distant, to be used for breakfast the same morning; while the messenger who carried it thither, should return again for dinner. What would have said Rip Van Winkle, if his sleep had been prolonged till the whistle of the locomotive had waked him to new life? He would not have been much more astonished, than some of the ancient and unbelieving denizens of the old shingle houses among the hills of Westchester. But the miracle has been accomplished, and the whole course of cultivation changed, for the tillable land has increased in value—and now every article of produce—everything valuable can be sent and daily sold in the city, and the owner lie down at night again in his own house, with the money under his pillow.

The great part of this county is composed of stony hills, more fit for pasturage than any other porpose. Milk is the most profitable article that can be produced. The dairyman gets two cents a quart, delivered in tin cans at any of the frequent railroad stations. Cows yield an annual average income of about \$30 per head. Cattle are driven from the west, every year and fattened here; and sheep would be, if it were not from the fact that farmers have been compelled to abandon keeping them, on account of the terrible destruction among them by dogs.

It was proposed in the agricultural society of this county to petition the legislature, for a law to levy a general tax upon dogs to pay for the sheep destroyed. Goveneur Morris moved to amend the motion, reverse the order, and tax the sheep to support the dogs; as it was evident that a majority of the people of this county were more in love with dog meat than with mutton. He had tried to keep sheep enough to furnish his own table, but found that he could not do it unless he took them into his own bed room every night. And even that would not save them; for they are frequently attacked in open day, in some secluded pasture. It is a pity that every one who keeps a sheep-killing cur, is not obliged to eat him. Young calves, too, are often destroyed by these intolerable pests of the Westchester farmer.

Much of the land in this county is suitable for fruit culture, and would be extensively planted in orchards of choice fruit for the city market, except for the reason given at length in another article. But now, who will plant an orchard when he knows the fruit will be all stolen? Or who will buy a flock of sheep to graze his rocky hills, although good for little else than sheep walks, when he knows one half of them, at least, will go to the dogs, instead of the butcher.

I enjoyed a long ride with an enterprising young farmer, through the winding crooked roads, and over the granite hills, and saw much more to interest my mind than I can now relate. Everything has an ancient, and I must say rather behind-the-age appearance. Old-fashioned gambrel-roofed farm houses; old barns and out-buildings, covered with an old mossy coat; old mossy wells, with old iron-bound buckets; old willow trees overhanging the old spring house, from whence the same little rill has trickled down among the old grey granite rocks, through long centuries of old time. Old stone walls meet the eye at every turn, to mark where once was perhaps a fence; where now is an unsightly line of stones, greatly in the way of cultivation, which would serve a far better purpose if buried beneath the surface to act as under-drains, than they do in their present position. Much of the land is of a character that would be benefited by such a disposition of the surface stones, which, in many cases, have been laid into walls, *just to get them out of the way*. Do farmers ever think how much walls are in the way; or how much land they now occupy? I noticed upon one farm, five contiguous lots, not one of which contained an acre, surrounded by heavy stone walls; and the remainder of

the farm was divided into inclosures of four or five acres each. Probably one-tenth of the land was thus lost to cultivation, besides the loss of time in annual repairs, and keeping them clear of bushes. Close as this county is to the city, the majority of the inhabitants have not yet caught the infecting spirit of improvement, which is now animating the age, and fulfilling that prophecy which says, the crooked shall be made straight, and rough places smooth. But the time is speedily coming when old prejudices must give way.

This is a reading age. The young farmers of Westchester are beginning to take cheap facilities of obtaining practical and scientific agricultural information. Many of them will obtain and read this journal the present year. I hope we may have many a pleasant evening together.

SOLON ROBINSON.

New York, November, 1850.

GOOSE AND DUCK PASTURE.

I RESIDE in a neighborhood where the land is poor and rocky, but abounds in marshes and ponds. The soil is either too thin, or too stony, or too wet to cultivate to any advantage; and yet, I cannot afford to let it lie idle. I have tried cattle feeding on it without any advantage; sheep have done better, still not quite well enough; I am therefore, of opinion, it would be more advantageous to turn it to a large goose and duck pasture. What is your opinion on the subject? Will it pay?

I have no doubt, that after the goslings get the pin feathers on their wings, they could find a good living on the pasture, and in the ponds; and as for the ducks, there is any quantity of grubs, tadpoles, grass roots, and other matter, for them to feed upon all summer. I am sure they would do well, but am not so confident about the geese, or more properly the goslings. Please to advise me.

INQUIRER.

We are of opinion that our correspondent would do well to stock his rough lands with geese and sheep. Large quantities of poor heathy land is thus devoted to them in England, and other parts of Europe. A sheep will get a living where a bullock would starve; and a goose would find sufficient pasture where a sheep could not exist. There are thousands of acres of just such land within sixty miles of this city, as our correspondent speaks of, all of which might be profitably devoted to goose pasture, and thus cheaply supply our markets with fat, luscious roasters.

THE EUROPEAN QUAIL.

WHEN wild, the quail is found throughout the eastern continent. It is a bird of passage, arriving in Europe in May, and taking its departure at the end of September. It feeds on wheat and other corn, rape seed, millet, hemp seed, and the like. It also eats green vegetables, as well as insects, and particularly ants' eggs.

In the house, it is fed on the same food, adding bread, barley meal, mixed with milk, and occasionally salad or cabbage, chopped up small, and, that it may want nothing to keep it in health, plenty of river sand for it to roll in and peck up grains, which assist its digestion; but this sand must be damp; for if dry, it will not touch it. It drinks a great deal, and the water, contrary to the opinion of some persons, should be clear, and never turbid. It moults twice in the year, once in autumn, and again in spring; it then requires river sand, and greater attention than at other times.



THE QUAIL.—FIG. 6.

The quail breeds very late, never before July. Its nest, if it can be called so, is a hole scratched in the earth, in which it lays from ten to fourteen bluish-white eggs, with large brown spots. These are hatched after three weeks' incubation. The young ones, all hairy, follow the mother the moment they leave the shell. Their feathers grow quickly; for in the autumn, they are able to depart with her to the southern countries. The males are so ardent, that if one is placed in a room with a female, he will pursue her immediately with extraordinary eagerness, tearing off her feathers if she resists in the least; he is less violent if he has been in the same room with her during the year. The female, in this case, lays a great many eggs, but

rarely sits on them; yet, if young ones are brought her from the fields, she eagerly receives them under her wings, and becomes a very affectionate mother to them. The young must be fed on eggs, boiled hard and cut small, but the best way is to take the mother with the covey, which may be done with a net. She watches over them attentively, and they are more easily reared. During the first year, one would think that all in the covey were females, the males resemble them so much, particularly before the brown shows itself on the throat.

The adult female, however, differs very sensibly from the male; her throat is white, and her breast paler, and spotted with black, like that of the throat. In the house, if allowed to range, its gentleness, neatness, and peculiar motions are seen to advantage; but it is often kept in a cage of the following make:—

A small box, two feet long, one foot deep, and four high, of any shape which is preferred; in this, are left two or three openings, one for drinking at, the other to give light; besides this, all is dark; the bottom is a drawer, which should be covered with sand, and have a seed drawer at one end; the top is of green cloth; for as the quail often springs up, it would hurt itself were it of wood. The case should be suspended during the summer, outside the window; for the quail sings much more when confined in this manner than if allowed to range the room, where there are many things to call off its attention from its song. This bird never sings when left to run about in a light room, except in the night, but continually when in a darkened cage.—*Browne's American Bird Fancier.*

This, it will be seen, is an entirely different bird from the one known in New England as the quail, which is the same bird known as the partridge, in Kentucky and other states. The name is a very vague one, for it is applied in different countries, to more than twenty different species. The one described in the preceding article, is unknown in America, unless some specimens turned loose by Audubon, near Charleston, South Carolina, some twenty years ago, have propagated their species in the forests of that state.

In Europe, this species is the most common of wild poultry kept in the house. If not susceptible of becoming naturalised in this country, this bird is worthy of the same object with us.

SMALL FARMS.

THERE are thousands of farms in the New-England states, varying in size from twenty-five to one hundred acres, upon which thousands of families not only live, but are well-to-do in the world, and have reared large families in comfort and prosperity. It is true, the children, for want of room to work, have to go to *contriving*, and it is this necessity that has filled the whole country with Yankee contrivances of all kinds, from a basswood pumpkin seed to a steam engine.

One of the greatest crops of the diminutive farms, is, that inventive genius which characterises the whole nation. No Yankee clock ever run with more regularity than the whole of the operations connected with some of the small farmers. Look at their cattle, horses, hogs, sheep, geese, ducks, and chickens. There is an appearance of unmistakable thrift about everything animate and inanimate, upon some of these places. It is true, many of the occupants work with the same old-fashioned tools their fathers did, and follow all the same time-honored practices; but the next generation will be more alive to the spirit of improvement.

STEALING FRUIT.

In a late conversation with an intelligent farmer of Westchester county, we recommended the raising of fruit, upon the rocky hill sides of the region north of this city, as the most profitable mode of cultivation that could be adopted; the New-York market being so easily approached by two rivers and three railroads, that intersect this county. His reply astonished us in no small degree. He said: "unless a great change is soon effected, farmers will be obliged to abandon the orchards now growing, and put the land into grass; because of the extensive system of robbery, that is carried on by hordes of idle vagrants, everywhere within reach of New York, who not only plunder nuts, berries, and fruits, growing wild, but actually enter the orchards in gangs, in open day, strip the trees, and carry off the fruit by baskets and bags; and if interfered with, they are boldly insulting, and sometimes show fight, rather than give up their booty. Even corn, potato and turnip fields are invaded, and the produce carried off by the wagon load. This kind of stealing is generally done in the night; but Sunday is the great day for robbing orchards; not only depriving the owner of his fruit, but destroying all the enjoyments of a quiet Sabbath day's rest or worship.

It is due to American character to say, that a

large share of these intolerable thieves are foreigners, mostly Germans of the very lowest grade, perfectly lawless, and utterly heedless of the right ownership of anything they can lay their hands upon; acting upon the principle that this is a *free* country, and actually arguing that every one has a *right* to a free distribution of all the fruits of the earth. If the nuisance continues to increase for the next five years in proportion to the last, all fruit cultivation will of necessity be abandoned in the vicinity of the city; and it will become a question with farmers whether railroads are not a greater curse than blessing; as they afford facilities to such vast numbers of petty thieves from the city, to penetrate the country and carry off all the marketable produce that would otherwise be sent forward by these lines of easy communication; thereby making the land more valuable, inducing better cultivation, and greatly enhancing the happiness of our rural population.

COLD, OR CATARRH IN SHEEP.

FLOCK masters should take particular care of their sheep when affected with a cold during the winter months; for if neglected, it frequently becomes so deeply seated as to be incurable, and ends in phthisis, or consumption. The best remedy for a cold is, first, place your sheep in a well-ventilated, dry stable, comfortably littered; and second, give it any slightly purging medicine, with a moderate allowance of hay, and a bran mash, one fifth of which should be oil meal. Colds, or catarrhs, are not only epidemic but endemic; be careful, therefore, where you winter your sheep, that there be no predisposing cause in their locality; and when they are attacked, remove them instantly from the flock. By following these precautions, and keeping them well fed, sheltered, aired, watered, and salted, one may bid defiance to disease among his flocks.

CONNECTICUT TOBACCO.—The growing and manufacturing of this crop, in the Connecticut-River Valley, has become a great business. At Suffield, there are some thirty cigar factories, at which 150 persons, at least, are employed. These hands will average 2,000 cigars a week, making 15,600,000 a-year, in one town. Most of them are made of domestic tobacco. Some of the best, with Cuba wrappers, are sold for real Spanish imported. Many a New-York dandy, while puffing his *three-for-a-shilling*, *real regalias*, is unwittingly contributing to the agricultural interests of old Connecticut.

Ladies' Department.



THE accompanying is a sketch of a pot I have had made for layering in, &c. There are two openings opposite each other, with a notch on one side of each to hold the branch, on the right of one opening, and the left of the other. These pots may be raised on stakes, and fixed with wires to enable the amateur to propagate any favorite standard rose, and cultivate it on its own roots, which insures against loss of the particular kind; few roses on their own foundations being destroyed by our winters, although budded varieties frequently perish. I have not seen any similar pots, and believe the idea to be new, but it may not be so.—*Gardners' Chronicle*.

FANCY BISCUITS.—Reduce one pound of blanched almonds to powder, and moisten with orange-flower water until you have a smooth paste; add a little fine flour and mix well, and then place in a pan over a slow fire; stir the mass constantly to prevent burning, until it becomes hard enough not to stick to the fingers; then mould it into various sorts of fancy shapes. Now make an icing of various colors and dip your forms to suit color and taste, and set them upon a clean sieve to dry. You may make them still more fanciful, by strewing over them different-colored pistachio nuts. To be served with nuts and cakes, at evening parties, or any other extraordinary occasion.

COLORING GREEN TEA.—Large portions of the tea imported under the name of *green*, are made so by throwing into the pans at the last heating of the leaves, a mixture of finely powdered *indigo* and *gypsum*, in proportion of three of the former to four of the latter. For every 100 lbs of green tea used, the consumer will swallow from 8 to 12 oz. of the latter. But the same persons who will exclaim against the *celestials* for munching rats, cats, and bow-wows, will swallow indigo and gypsum, or what is much worse, prussic acid or verdigris, both deadly poisons, and which are furnished us outside barbarians, simply because our market demands it, as it did annattoed cheese a few years since.

ALUM WHEY, made by boiling a quarter of an ounce of alum in a pint of milk, and strained, is a good medicine for bowel complaints of children. Give a wine-glass full three or four times a-day.

PRESERVING WILD FOWL.—Remove the intestines carefully, and wipe out all the blood with an old soft towel, until the flesh is quite dry; then dust flour over the inside, and scatter two or three drops of creosote upon a piece of blotting paper, and put that in and tie the bird up tight in another piece of similar paper, upon which put a few drops more creosote; then hang up each carcass, separate, in a cool, dry place, and it will keep sweet for a long time. Never remove the feathers from a bird you wish to preserve.

ALMOND FLAVOR FOR PASTRY, &c.—Dissolve one ounce of oil of almonds in one pint of spirits of wine, and use one drop to a pound of dough. It is powerful and poisonous, but not injurious in small quantities, and imparts a pleasant flavor.

Almond paste is often adulterated. Every lady can make her own by beating the almonds into a smooth paste, in a mortar and then adding white of eggs and rose water, with half as much spirits of wine, to give the mass a proper consistency. It is a harmless cosmetic when made in this way, and very useful to prevent chapped hands.

TO MAKE BLANC.—Grate 1 lb. old dry bacon, and add 1 lb. beef suet, $\frac{1}{2}$ lb. of butter, two lemons, two carrots cut into dice-sized cubes, three or four chopped onions, and just water enough to make a stew; boil about an hour. Some prefer to add a little boiled rice on dishing up, if there is much water remaining unabsorbed.

A VALUABLE CEMENT FOR HOUSEHOLD USE.—Take new milk, half a pint, and curdle with sharp vinegar; separate the whey and mix with the curd, the whites of five eggs, beat well; add fine quicklime, and mix till you have a ductile paste or putty. It will stop cracks, and is fire and water proof.

EGG BISCUITS.—Beat separately the whites and yolks of twelve eggs; mix, and add $1\frac{1}{2}$ lbs. of powdered white sugar; whisk all into bubbles; add 1 lb. of flour and the grated rinds of two lemons. Fill buttered tin molds; grate sugar on top; bake one hour in a quick oven.

TO REMOVE GREASE SPOTS FROM FURNITURE, WOOD, OR MARBLE.—Make a paste with Fuller's earth, soft soap, and pearl-lash, and spread over the spot, and let it dry for twenty-four hours, and then wash off the paste.

Foreign Agricultural News.

We are in receipt of our foreign journals to the 16th of November.

MARKETS.—*Ashes*, dull. *Cotton* has rallied, and is $\frac{1}{2}$ d. per pound, higher. *Flour*, firm. *Beef and Pork*, inactive. *Lard*, an advance of 1s. per cwt. *Wool*, firm, with a light stock on hand.

Soiling.—At the East Berwickshire Farmer's Club, it was unanimously resolved, after a full discussion, that soiling is preferable to grazing in the fields.

Trimming Box Borders.—This is now done with a sharp scythe. First, cut the top quite level, with the scythe or shears; then draw a line through the centre to serve as a guide—the trimmer stands upright, and by short quick jerks, cuts off all the lateral branches at a given number of inches from the line. A smart hand will trim a mile a-day.

Sale of Shorthorns.—At Mr. Colvin's sale of short-horns, at Monkham's Hall, near Waltham Abbey, Essex, on Thursday last, sixty-seven head, comprising bulls, cows, and calves, fetched the large sum of £2,033 17s. averaging £30 7s. (£150) each. Mr. Henry Stafford, the editor of the *Herd Book*, was the auctioneer.

Removal of Subdivision Fences.—This subject is now warmly discussed in the English Agricultural periodicals. One writer says: Where the smallness of the fields, in some parts of England, and the enormous mounds, with all their accompaniments of large timber, brushwood, and weeds, is considered, it is easy to see that a wholesale removal is necessary to profitable culture.

Coal and Wood Ashes.—A writer in the North-British Agriculturist, contends that coal ashes rank very low as a chemical meliorator of earth and soils. Wood ashes, according to Liebig, are of far more value. We agree with the author and the chemist in their estimate of the value of coal and wood ashes, and so will our friends beyond the Atlantic, where there is more wood to spare for making ashes than on this side of the water. Soot is more favorably reported of; an analysis of it is given, and a report of the results as a manure in raising potatoes appears favorable. Soot is one of those manures which acts rapidly on vegetables; but it seems of too volatile a nature to last long as a manure in the soil. From our own experience, we would say that, at the rate of 25 to 30 bushels of soot an acre, as good a return of potatoes might be obtained, where the soil was not in an exhausted state, as with from 15 to 20 tons of farmyard manure. Green broom tops, as we have formerly stated, we have found to be much superior to either, in raising potatoes.

Adulteration of Guano.—In the same paper, the editor says: In the article of guano there is much adulteration to be met with; it were well if some simple, but efficient method of detecting such adulteration were found out and published, so as to put it in the power of every farmer to ascertain the comparative value of the article. This, we think, might be accomplished by the

society's chemist, and made public through the agricultural press of the country. This might put an end to the nefarious trade of adulterating, and of making the farmer pay nearly double price for an article which he now feels to be necessary for carrying on his operations. Could not this be profitably made a question for discussion at some of the coming monthly meetings? Few questions can be of more importance at this time to the honest farmer. We shall most gladly receive and insert any hints that may be useful on this subject from our chemical readers or correspondents, and thus join in a warfare against the too prevalent modern custom of adulterating goods.

Agricultural Discussions.—At one of the monthly meetings of the Highland Society, Mr. Hope, said: If we expect to be made wiser by hearing the experience of others, we should also be willing to communicate our own opinions. I have great hopes that in the continuance of the same frank, easy, mutual exchange of opinions and practices, with comparisons of different modes of agricultural management, will not only be of great advantage to those who participate in these discussions, but also to the country at large. As a farmer, I shall positively be ashamed of my order, if we do not profit by the advantages we now possess in our numerous organisations and journals, to gather information as it were, into a focus, from all parts of the country.

We perfectly agree with the remarks of this very sensible Scotch farmer, which are equally applicable to this country as to that. By discussion and study, and enlightening the mind, our original ideas may be confirmed, or entirely swept away, and valuable improvements adopted. The Scotch farmers do not sit down, like thousands in this country, content that they know all about farming now, but they open their minds to inquiry and an earnest desire, if there is any better system than the one they are following, to find it out, adopt, and enjoy its benefits.

Quantity of Seed Wheat per Acre in Scotland.—One of the speakers at the same meeting said his practice was to sow two bushels at first; increasing to two and a half late in the season; altogether by drill machines, which he considered preferable to broadcast, because it allowed of spring hoeing the crop, a very great advantage.

Sale of Devon Cattle.—The sale of the celebrated Devon stock of Mr. Matthew Paul, of Compton Pauncefoot, attracted an immense concourse of gentlemen, farmers, and others, from all parts of the country, on Tuesday last. We understand that a portion of the stock was purchased for the Great Exhibition in 1851. The following were the prices obtained:—Four-year-old bull, £40; bull calf, £20 10s.; do £12 10s.; do, £12; and four do., £10 each. Dairy cows, in calf, £47, £40, £35, £24, £23, £20, and down to £11 10s.; the whole forty-four averaging about £17 10s each. Three-year-old heifers, in calf, £19, £15 £12, £11 each, and downwards. Three year-old heifers, barren, £80 per pair; and £18 10s., £18, and £16, each. Yearling heifers, in calf, £24 per pair.

Editors' Table.

TO SUBSCRIBERS.—The last number of the ninth volume of the *Agriculturist* is before you. Have we fulfilled the promise that it should equal, if not exceed in value, any of those previously published? If so, then it is worthy of your patronage; for it contains more matter that is interesting to the farmer, planter, gardener, and mechanic—to say nothing of the thousand valuable household items of information—than can be had for the same amount of money in any other form, even in these days of cheap literature.

The tenth volume we intend to make still more valuable; and we have, therefore, no hesitation in urging you to continue to read, because we know you will derive information, useful to you in nearly all the industrial pursuits of life. Is it not your duty, in doing to others as you would be done by, to urge your friends to participate in its advantages and become subscribers also to this paper? Are we not fairly entitled to compensation for our labor? The price of a single subscription is nothing to you; but ten thousand are something to us, for it takes nearly that number to pay expenses. No agricultural paper in the United States expends money so freely as the *Agriculturist* has done to obtain valuable and interesting information, and furnish embellishments for every number of the paper.

Of the ability of the editors to make a paper valuable, we need only point to their previous works. Our correspondents from all parts of the country are equal at least, to those of any other journal of the same, character.

MR. SOLON ROBINSON, whose name is familiar to all our readers, has made several long and expensive journeys through the United States, to collect information exclusively for this work; and before this article reaches our subscribers, he will be on his way to Virginia, North and South Carolina, Georgia, and Florida, for the same purpose. To defray all these extraordinary expenses, we must have subscribers. If "the laborer is worthy of his hire," do not only what is due from yourselves, but persuade your neighbors and friends also, not to withhold from themselves, their children, and household, information of inestimable importance to them.

THE FAIR OF THE AMERICAN INSTITUTE.—Our intended notice of this annual exhibition of American industry is crowded out by other matter. The number of visitors was greater this year than upon any previous one. We have taken pains to ascertain correctly the amount of money received for tickets—\$21,988, which, upon the usual ratio of calculation for free admission, will give 320,000, for the number that must have visited the fair at Castle Garden during the three weeks it was open. The advantage exhibitors gain by the opportunity of extending a knowledge of their business among such a vast number of persons, and perhaps, getting orders for goods, is undoubtedly of considerable importance.

EXCURSION TICKETS TO THE WORLD'S EXHIBITION.

The house of G. W. McHenry & Co., of Philadelphia will issue cabin-passage certificates for the Industrial Exhibition to take place in London next year. The tickets for the excursion to Liverpool and back are to be furnished at the low price of \$100, including everything but wines and liquors. The trips will commence with the packet ship *Mary Pleasants*, to sail on the 15th of March next.

THE AMERICAN AGRICULTURAL BOOK PUBLISHER.

C. M. Saxton, the publisher of this paper, 123 Fulton st., (up stairs,) is justly entitled to the honor of the above appellation; for he has already published more agricultural works than any other man in America, and will greatly increase the number during the present year. Among those lately published, is

JOHNSTON'S LECTURES on the general relations which science bears to Practical Agriculture. Price, handsomely bound in cloth, gilt, 75 cts.; in paper covers for mailing, 50 cts.

But the cheapest valuable agricultural work ever published in this country, is that entitled **LECTURES ON THE APPLICATIONS OF CHEMISTRY AND GEOLOGY TO AGRICULTURE**; by the same author, (Prof. Jas. F. W. Johnston, of England,) an octavo volume of 700 pages, for one dollar in paper covers, or one dollar and a quarter, bound. This work can be sent all over the United States in paper covers by mail, for about 20 cts., postage. Its cheapness and great value should induce every farmer in America to obtain a copy without delay.

VALUABLE WORK NOW IN PRESS.—Mr. Saxton is republishing the great work of Youatt & Martin on Cattle, with all the original engravings; and an addition of the most reliable veterinary information of England and France; together with a treatise on milk, butter, cheese, and the management of the dairy; and many other matters of interest to stock breeders. For the purpose of making the work more valuable, the publisher has employed Mr. Stevens, well known in this country as an importer of cattle and scientific breeder, to edit the work, and adapt it to the United States.

EAST-INDIA PUMPKINS, from the garden and nurseries of Jacob Hewes, near Leipersville, Pa. We forwarded the above as directed, except one we kept ourselves, for the purpose of testing its quality, and here is the Captain's acknowledgement.

Friend Allen:—Your note, with the present from friend Hewes, has been received. These pumpkins are old Calcutta acquaintances of mine, which I am glad to meet with in this country, having lost the seed, I brought from there, by the mice. I appreciate these, not alone for their good qualities, but because it is the first acknowledgment I have ever received from any of your readers that *they* appreciate the labors of

REVIEWER.

The Valley, Nov. 25th, 1850.

P. S. I shall forward the seed of the above in due time, with instructions to your seedsman to give one or two, only, to each person who calls for garden seeds in the spring. This will give them a wide circulation.

Review of the Market.

PRICES CURRENT IN NEW YORK, DECEMBER 8, 1850.

ASHES, Pot.....	100 lbs.	\$6.06	@	\$6.12
Pearl.....	do.	5.75	"	5.81
BALE ROPE.....	" lb.	9	"	11
BARK, Quercitron.....	" ton.	36.00	"	40.00
BEANS, White.....	" bushel.	75	"	1.50
BEESEWAX, American, Yellow.....	" lb.	20	"	28
BOLT ROPE.....	" "	10	"	11
BONES, Ground.....	" bushel.	45	"	55
BRISTLES, American.....	" lb.	25	"	65
BUTTER, Table.....	" "	15	"	25
Shipping.....	" "	9	"	15
CANDLES, Mould, Tallow.....	" "	10	"	13
Sperm.....	" "	25	"	30
Stearine.....	" "	25	"	30
CHEESE.....	" "	5	"	10
COAL, Anthracite.....	2,000 lbs.	6.50	"	7.00
CORDAGE, American.....	" lb.	11	"	13
COTTON.....	" "	12	"	16
COTTON BAGGING, Am. hemp.....	" yard.	15	"	16
FEATHERS.....	" lb.	27	"	35
FLAX, American.....	" "	8	"	9
FLOUR, Sour.....	" bbl.	3.62	"	4.12
Ordinary.....	" "	4.18	"	5.00
Fancy.....	" "	5.25	"	6.75
Buckwheat.....	" "	—	"	—
Rye.....	" "	3.25	"	3.62
GRAIN—Wheat, Western.....	" bushel.	1.00	"	1.35
Red and Mixed.....	" "	.90	"	1.05
Rye.....	" "	75	"	80
Corn, Northern.....	" "	69	"	71
" Southern.....	" "	68	"	70
Barley.....	" "	95	"	103
Oats.....	" "	40	"	50
GUANO, Peruvian.....	2,000 lbs.	—	"	60.00
Patagonian.....	" do.	—	"	40.00
HAY, in Bales.....	" 100 lbs.	45	"	60
HEMP, Russia, Clean.....	" ton.	210.00	"	230.00
American, Water-rotted.....	" "	160.00	"	200.00
Dew-rotted.....	" "	140.00	"	175.00
HIDES, Southern, Dry.....	" "	10	"	11
HOPS.....	" lb.	10	"	30
HORNS.....	" 100.	2.00	"	10.00
LEAD, Pig.....	" 100 lbs.	4.62	"	4.75
Pipes for Pumps, &c.....	" lb.	5	"	7
LARD.....	" lb.	7	"	8
MEAL, Corn.....	" bbl.	3.00	"	3.37
MOLASSES, New-Orleans.....	" gallon.	30	"	35
MUSTARD, American.....	" lb.	7	"	10
NAVAL STORES—Turp.....	" bbl.	1.75	"	2.00
Pitch.....	" "	1.25	"	1.75
Rosin.....	" "	1.35	"	1.40
Turpentine.....	" "	2.44	"	2.57
Spirits of Turpentine.....	" gallon.	33	"	37
OIL, Lined, American.....	" "	79	"	82
Castor.....	" "	1.37	"	1.50
Lard.....	" "	65	"	75
OU, CAKE.....	" 100 lbs.	1.25	"	1.50
PEAS, Field.....	" bushel.	75	"	1.50
Black-eyed.....	" 2	1.75	"	2.20
PLASTER OF PARIS.....	" ton.	2.00	"	2.75
Ground, in Barrels of 300 lbs.....	" "	1.12	"	1.25
PROVISIONS—Beef, Mess.....	" bbl.	7.00	"	10.00
" Prime.....	" "	3.75	"	5.00
" Smoked.....	" lb.	4	"	12
" Rounds, in Pickle.....	" "	4	"	6
Pork, Mess.....	" bbl.	10.00	"	12.00
" Prime.....	" "	6.50	"	9.00
Bacon Sides, Smoked.....	" "	3	"	4
" in Pickle.....	" "	3	"	4
Hams, Smoked.....	" "	5	"	9
" Pickled.....	" "	4	"	7
Shoulders, Smoked.....	" "	4	"	6
" Pickled.....	" "	3	"	5
RICE.....	" 100 lbs.	3.00	"	3.50
SALT.....	" sack.	1.00	"	1.50
" Common.....	" bushel.	20	"	35
SEEDS—Clover.....	" 6 1/2	—	"	9
Timothy.....	" bushel.	2.00	"	3.50
Flax, Rough.....	" "	1.60	"	1.65
SODA, Ash, (80 per cent. soda).....	" lb.	3	"	—
Sulphate Soda, Ground.....	" "	1	"	—
SUGAR, New-Orleans.....	" "	5	"	8
SUMACH, American.....	" ton.	35.00	"	37.00
TALLOW.....	" lb.	7	"	8
TOBACCO.....	" "	4	"	15
Eastern, Seed-lent.....	" "	15	"	20
Florida Wrappers.....	" "	15	"	60
WHISKEY, American.....	" gallon.	27	"	28
WOOLS, Saxony.....	" lb.	40	"	60
Merino.....	" "	35	"	40
Grade Merino.....	" "	30	"	35
Common.....	" "	20	"	30

NEW-YORK CATTLE MARKET.

At Market 2,300 beef cattle, (800 southern, the rest from this State and the East,) 130 cows and calves, and 8,000 Sheep and Lambs.

Beeves.—The supply of beeves last week was more than enough to meet the demands of purchasers; about 370 head at both markets remained over, unsold. Prices of good retailing qualities ranged from \$5.50 to \$7.75. Market closed dull.

Cows and Calves.—All sold at prices ranging as to quality, from \$22.50 to \$45.

Sheep and Lambs.—Sales of sheep at from \$2.75 to \$4.50. Lambs, \$1.50 to \$3.50. Left over, 600. nov. 25

REMARKS.—Wheat and corn have slightly advanced, and are very firm. Nothing else worthy of note since our last.

The Weather continues mild for the season, and has been favorable for the sugar harvest. Upon the whole, the past year has been a highly prosperous one for the farmers of our country, for which they should be duly grateful to a kindly superintending Providence.

TO CORRESPONDENTS.—Communications have been received from James G. Kinnaird, A Subscriber, Samuel D. Martin, L. F. A., and Reviewer.

Subsailing Light, Sandy Land.—A Long-Island Subscriber.—We can see no advantage in subsailing your land.

In consequence of the coming holidays monopolising everything else in New York this month, we are obliged to make up the January number so early in advance, as to preclude several articles designed for it. They shall appear in February.

¶ All communications designed for a certain number of this periodical, to insure their insertion in such number, must be received by us one month in advance.

ACKNOWLEDGEMENTS.—List of Premiums of the First Great Fair of the Kentucky Agricultural and Mechanical Society; The Agriculturist's Guide and Almanac for 1851, from James G. Reed.

FARMERS' AND PLANTERS' TOOL

Chests. We have fitted up a number of tool chests especially for the use of farms and plantations, variously assorted with suitable tools, and at prices ranging from \$20 to \$100.

Chest No. 1 contains a Hand Saw, set of Planes, Hand Axe, Nail Hammer, Hatchet, Drawing Knife, Steel Square, Trying do., Oil Stone, Compasses, Chalk Line, four Framing Chisels, four Firmer do., and four Augers, \$20.

No. 2 contains, in addition to the above, a Back Saw, Compass Saw, and Carpenter's Adz, \$30.

No. 3 contains, in addition, a Broad Axe, Mallet, Spoke Shave, Gauge, Saw Set, Brad Awls, and Nail Patches, \$31.

No. 4 contains, also, a brace of Bits, Bevel, Rabbit Planes, Pannel Gauge, four Files, and five additional Augers and Chisels, \$40.

No. 5, a large Jointer, two Rabbit Planes, two Bed do., two Match do., Plow and Bits, Hand Gauge, and Spirit Level, are added, \$54.

No. 6 has an extra fine brace of Bits, three Bed, and one additional Rabbit Planes, Gages, Files, &c., \$62.

No. 7, one Pannel Square, one pair of Match Planes, one dozen heavy Firmer Chisels, Slitting Gauge, Frying Square, Fillister, and Carpenter's Rule are added, \$70.

No. 8, Gutter Plane, Sash do., Circular do., two Dado Planes, Compasses, Adz, and Tape Line are added, \$80.

To these may be added any other tools required, such as Pinchers, Pliers, Drills, Hand Vice, Patches, Rivets, Soldering Tools, suitable for repairing harnesses; and, in fact, almost any kind required upon the farm or plantation, at a reasonable addition to the price of any chest ordered.

A. B. ALLEN & Co., 189 and 191 Water st.

SELLING OFF TO CLOSE THE BUSINESS.

Linnæan Botanic Garden and Nursery, late of William Prince, deceased. Flushing, Long Island, Near New York.

WINTER & Co., Proprietors.

The proprietors have still remaining, a very considerable stock and variety of Fruit and Ornamental Trees, Shrubs, Vines, Plants, Roses, &c., which they will dispose of for cash, at a reduction of 25 to 50 per cent. and upwards, from the usual prices, according to kind and quantity. Descriptive Catalogues, gratis, on application, post paid.

Apple trees, two to four years old, from \$5 to \$10 per 100. Pear trees, two to four years old, \$25 to \$50 per 100. Cherry trees, two years old, \$12.50 per 100. Orange Quinces, three and a half to five feet, \$12.50 per 100. Black Hamburg and other Foreign Grape Vines, extra strong plants, \$5 per doz. Two-year old seedling Plumb Stocks, \$7 per 1,000.

WINTER & CO.

FRUIT TREES FOR SALE.—50,000 Peach Trees, all of the best market varieties, at the following prices:—By the single hundred \$3. One thousand, \$45. And ten thousand for \$400. Also, 40,000 Apple Trees of the best market varieties, and of large size. By the single hundred, \$12.50, or one thousand for \$110. Mats and packing, \$1 per hundred for Peach, and \$2 for Apple Trees. Catalogues will be forwarded to all applicants.

ISAAC PULLEN,

Jan 41 Hightstown, Mercer Co., New Jersey.

THE AMERICAN LIVE-STOCK INSURANCE COMPANY, Vincennes, Indiana.

Charter Unlimited. Granted January 2d, 1850.

CAPITAL \$50,000!

For the Insurance of Horses, Mules, Prize Bulls, Sheep, and Cattle, of every description, against the combined risks of Fire, Water, Accidents, and Disease.

Losses paid in 30 days after proof of death.

DIRECTORS.

Joseph G. Bowman,
Hiram Decker, M.D.,
Isaac Mass,
George D. Hay,

John Wise,
Alvin W. Tracy,
Abner T. Ellis,
Abm. Smith,

Thomas Bishop.

JOSEPH G. BOWMAN, Pres't.

B. S. WHITNEY, Sec'y. WM. BURTON, Treasurer.

Agents solicited throughout the Union. Address B. S. WHITNEY, Sec'y., Vincennes, Indiana. my 1y

BRANDER'S ENCYCLOPEDIA OF SCIENCE and Art.—A Dictionary of Science, Literature, and Art; comprising the History, Description, and Scientific Principles of Every Branch of Human Knowledge; with the Derivation and Definition of all the Terms in General Use. Edited by W. T. Brande, F. R. S. L. and E., assisted by Joseph Cuuvin, Esq. The various departments by eminent, literary and scientific gentlemen. Illustrated by numerous engravings, on wood. 8vo., sheep extra. \$4.

This valuable work, for accurate information upon a vast variety of subjects brought up to the present day, and carefully digested, is unrivaled and unequalled.—*Tait's Magazine*.

Clear and authentic, copious without prolixity, it does not furnish a bald explanation of facts and terms, but a development of principles well illustrated and explained.—*Times*.

He who has no encyclopedia will find it an excellent substitute for one; and he who has, will find it a valuable supplement. While it is sufficiently full and copious to supersede the necessity for the more gigantic works of an encyclopedic character, no mere cyclopedia can supply its place.—*Eclectic Review*.

HARPER & BROTHERS.

SCHOOL OF APPLIED CHEMISTRY.

Yale College, New Haven. John P. Norton, Professor of Scientific Agriculture. The Laboratory of this department is now open, and instruction is given in all branches of Chemistry, Organic and Inorganic. Particular attention is paid to Agricultural Chemistry; and students in this branch have every facility afforded for acquiring a knowledge of the analysis of soils, plants, &c. A course of Lectures on Scientific Agriculture, by Professor Norton, commences in January, and continues two and a half months. This is intended to present theory united with practice in a plain and distinct manner, so that the general principles can be comprehended by all. Analyses and investigations made, on reasonable terms. For further information, apply to
d3t Professor J. P. NORTON, New Haven, Ct.

COMMERCIAL GARDEN AND NURSERY

of Parsons & Co., Flushing, near New York. The proprietors of this establishment offer for sale their usual assortment of Fruit and Ornamental Trees, Shrubs, Vines, Roses, &c. Their stock of Apples and Pears is finer than any they have before offered. Also, Pears on Quince, of their own growing. The Ornamental Department contains the usual well-known varieties and all the best new Trees and Shrubs for Lawns and Arboretums, including the new Pines, Araucaria Imbricata, and Cryptomeria japonica, with Cedar of Lebanon, at one to two dollars each, and Cedrus deodara of various sizes, at one dollar per foot. Catalogues furnished gratis on application by mail.
o1f PARSONS & CO.

GREENHOUSE PLANTS, VINES AND

Roses. Parsons & Co. offer for sale every desirable variety of Greenhouse Plants, and many valuable novelties recently introduced from Europe. Attention is particularly directed to their fine stock of Camellia, wilderit, the perfection of whose form is not attained by any other variety. The original stock, both of this and C. Abbey Wilder, is in their possession.

Growers of Grapes are invited to examine their Vineries, now in full fruit, and from which they can furnish good vines of about forty varieties, at

50 cents for those one year old.

75 " " two years old.

\$1.00 " " of extra size.

Their stock of saleable roses includes some thousands on their own roots of the Remoutant, Bourbon, China and Garden Roses, in their various sub-classes. Catalogues furnished gratis on application to Flushing, near N. Y. PARSONS & CO.
o

A PRACTICAL TREATISE on the Cultivation of the Grape Vine on open walls, with a descriptive account of an improved method of planting and managing the roots of Grape Vines. By Clement Hoare. To which is added an appendix, containing remarks on the culture of the Grape Vine in the United States. Price, Cloth 50 cents. Paper covers 35 cents.
nov. Published by C. M. SAXTON.

BOOKS FOR THE PEOPLE.

C. M. SAXTON,

AGRICULTURAL BOOKSELLER,

123 FULTON STREET, N. Y.

Allen's Treatise on the Grape Vine, with Illustrations. \$1.12½ cents, cloth—\$1 in paper covers.

Browne's American Bird Fancier, considered in reference to rearing, feeding, and management of cage and house birds. Price 50 cents in muslin, or 25 cents with paper covers.

Randall's Sheep Husbandry.—C. M. Saxton has now ready a new edition on Sheep Husbandry, containing a Treatise on the Acclimation of Sheep in the South.

Also, a complete Manual of Breeding, Summer and Winter Management, and of the Treatment of Diseases, with 70 Illustrations. By Henry S. Randall Esq. Price \$1.25 bound in cloth. Mail edition \$1.

Stevens' Book of the Farm, now complete. Detailing the labors of the Farmer Steward, Plowman, Hedger, Cattleman, Shepherd, Field Worker, and Dairymaid. By Henry Stephens. With numerous Engravings. Price only \$4. Mail edition, with paper cover \$3.50.

Fessenden's Complete Farmer and American Gardener now in press, containing near 700 pages. It will be handsomely bound in cloth, gilt. Price \$1.35. Mail edition, in paper covers, only \$1. This is one of the cheapest books that has been offered to the Farmers of the United States.

Johnston's Agricultural Chemistry.—Price, in cloth, \$1.25. Mail edition, \$1. This work is the most complete Manual of Chemistry, for Farmers ever published. It contains over 700 duodecimo pages. Every good book relating to agriculture, can be obtained of C. M. Saxton.

Browne's American Poultry Yard.

—The American Poultry Yard; comprising the Origin, History, and Description of the different breeds of Domestic Poultry, with complete directions for their Breeding, Crossing, Rearing, Fattening, and Preparation for Market; including specific directions for Caponising Fowls, and for the treatment of the principal diseases to which they are subject; drawn from authentic sources and personal observation. Illustrated with numerous Engravings. By D. J. Browne, author of the *Sylvia Americana*.

ENDLESS-CHAIN PUMPS, OR WATER

Elevators. These highly approved machines operate upon the same principle as those used for grain. The elevator is made a part of an endless chain, that works over an iron wheel, and down into the water, around a pulley into the tube, through which a constant stream is made to flow into the pail, by simply turning the crank, attached to the wheel at the top, which any light hand can do with great ease. They are made of several sizes, and can be fitted up for any depth well, or cistern required.

A New Use for Chain Pumps.—One of these of large bore, is the most efficient machine ever used for emptying the vaults of privies, where the contents are in a semi-liquid state.

EAGLE PLOW.—No. 28.

—The following extract from the letter of a gentleman who purchased one of these plows, fully explains its character. "In answer to your inquiry how I like the great breaking plow, I have to say it entirely exceeds my expectations, and even my own recommendation, which I then thought quite extravagant. I put on four stout yoke of oxen, and drove into the thickest patch of scrub oak roots upon my farm; not without some misgivings, that I should break the plow instead of the roots; but I have now turned over twenty acres as completely as though it had been nothing but stubble, and the plow is this day better than it was when it came from your store. I think it the cheapest and best plow for such heavy work ever invented."

These plows are for sale at our Agricultural Warehouse, No's. 189 and 191 Water st., New York. Price, plain, \$18—full rigged, with wheel, draft rod and cutter, \$20 A. B. ALLEN & Co.

GARDEN AND FIELD SEEDS FOR 1851.

We are getting in, not only our usual supply, but a larger stock than ever, of all kinds of seeds required, either for field or garden culture, fresh and free from noxious weeds, &c., which are offered at wholesale or retail. Orders for trees and shrubbery executed as usual.

A. B. ALLEN & Co. 189 and 191 Water st. N. Y.

MINER'S BEE HIVE.

—This beautiful and valuable Hive, may be had of the subscribers, and sent to any distance, for \$5, including a Right to make the same; with full directions, so simple that any joiner can make it for only \$2. This hive is positively the best that has ever been sold in the United States.
duf

A. B. ALLEN & Co. 191 Water st., N. Y.

NEW-YORK AGRICULTURAL WAREHOUSE AND SEED STORE,

A. B. ALLEN & CO. 189 AND 191 WATER STREET, NEW YORK.

THE SUBSCRIBERS keep constantly on hand, and offer for sale the largest and most complete assortment of Agricultural and Horticultural Implements, and Field and Garden Seeds in the United States, among which may be found the following:—

WATER BAMS—of various sizes, for raising water, made entirely of metal.

CIDER MILLS of simple construction, and capable of grinding fine, and in the most rapid manner.

MILL FOR GRINDING BONE DUST.—For sale, a second-hand mill, to be driven by horse, steam or water power.

WINTER WHEAT.—Etrurian, Mediterranean, White Flint, and several other varieties, of the best and most improved kinds of Winter Wheat for sale.

TIMOTHY, fresh reaped, a choice article.

BLUE GRASS, Fresh Kentucky, just received, suitable for lawns, and early and late pastures.

CLOVER, both Red and White, free from all foul seed.

WAGONS.—Single or double of any required shape. Also, Axles and Wheels.

CARTS.—Hand and Ox Carts, and Wheels of different sizes, made of the best material at short notice.

FERTILISERS of various kinds constantly on hand and for sale on reasonable terms—such as

GROUND PLASTER—in bags or barrels.
GROUND BONES—Bone Dust, or Meal, of superior quality, in barrels.

POUDRETTE—at manufacturers' prices.

FOREIGN SEEDS, of superior quality and late importation.

GRASS SEEDS.—Ray Grass, Lucern, and White Dutch Clover Seeds.

GARDEN SEEDS.—A large stock selected with care, expressly for the American Market.

ENDLESS-CHAIN PUMPS of all sizes, to be furnished complete, or in either of their parts, both in large and small quantities.

HIGHLY IMPROVED FORCING PUMP and Garden and Fire Engine, a better and cheaper article than ever before offered in the New-York, or any other market, to be sold in any quantity.

NEW AND HIGHLY IMPROVED LACTOMETERS.—We have just got up a new article of cream gauge, far better and more accurate than any heretofore made. Price \$5, with a liberal discount to dealers.

CHEAP SOUTHERN PLOWS.—Nos. 10, 11, 12, 14, 15, and every variety, including several new and highly popular kinds, for sale in large quantities.

ROOT PULLERS.—A useful instrument for drawing out bushes, roots, and small stumps.

VEGETABLE BOILERS, used for boiling food for stock, holding from 15 to 120 gallons.

PREMIUM FANNING MILLS.—These machines considering the simplicity of their construction, and efficiency of all their operations, are the best in use.

SAUSAGE CUTTERS AND STUFFERS.—These will save nine tenths of the labor in cutting sausage, or other mince meat.

EAGLE PLOWS.—Many plows having been sold under the name of the *Eagle Plow*, which are not genuine, this is to give notice that all plows sold in this city under that name, to ensure confidence, will have our name marked on the beam, and no others purchased here, can be relied on as genuine without this brand.

Be particular, also, as to the name, number, and street, which should be

A. B. ALLEN & CO., 189 and 191, Water st., New York.

BRICK MACHINES of the best construction, will make 10,000 to 15,000 bricks per day by hand.

GRAIN MILLS.—Steel and Cast-Iron Mills at \$6 to \$25, and Burr-Stone at \$75 to \$250, for Horse or Steam Power.

PUMPS.—Suction and Forcing Pumps of all sizes with pipe, at lowest manufacturers' prices.

CORN AND COB CRUSHERS, of different varieties, efficient and durable both for hand and horse power.

RICE THRESHERS, suitable for large or small Plantations, and adapted to Wheat, Rye, Barley, and Oats.

WHEELBARROWS, Canal and Coal Barrows, of various kinds and sizes.

STRAW CUTTERS of every approved pattern and size, for hay, straw, corn and cane stalks.

CORNSHPELLERS.—Several new styles recently made, together with all the old and most popular kinds.

MACHINES for rasping the Mandioca, or Brazilian arrow root; the *Curcuma angustifolia*, or East India arrow root; the *Cycas circinalis*; the *Zamia pumila* of Florida; *Marrubia arundinacea*, or common arrow root plant of the West Indies; and the yuca, or cassava plant of Cuba; potatoes, &c., &c.; from some or all of which sago, arrow root, tapioca, and starch are made.

ALLEN'S IMPROVED PORTABLE RAILROAD HORSE POWER, THRESHER, AND SEPARATOR.—The advantages of the above horse powers are—1. They occupy but little more space than a horse. 2. They can be moved by the weight of the horse only, by placing the machine at an angle of 10 or 15 degrees. 3. They are easily transported, simply constructed, not liable to get out of order, and move with little friction.

The *Overshot Threshers* consist of a small-spiked cylinder with a concave top, and possess these advantages. 1. They have a level table for feeding, thus enabling the tenders to stand erect, and control the motions of the horse and machine by means of a brake, by which accidents are avoided. 2. In consequence of the spikes lifting the straw and doing the work on the top, stones, blocks, &c., drop at the end of the table, and are not carried between the spikes. 3. The overshot cylinder does not scatter the grain but throws it within three feet of the machine. 4. This arrangement also admits of attaching a separator high enough from the floor or ground to allow all the grain to fall through it, while the straw is deposited by itself in the best condition for binding. 5. Neither grain nor straw are broken by this machine. 6. The cylinder is long, which admits of faster and more advantageous feeding; it is smaller and with fewer teeth than ordinary threshers, thus admitting of more rapid motion and faster work with less power; and the diminution of teeth in the cylinder is fully made up by an increased number in the concave top, which is stationary. 7. The separator is a great advantage in diminishing the labor of raking out the straw, as it leaves the grain in the best condition for the fanning mill. Three men with a single power, can thresh 100 to 150 bushels of wheat or rye per day; and four men with a double power, twice that quantity. All the above are compact and can be carried where wanted, complete, or they may be readily taken apart and packed for distant transportation by wagon or otherwise.

Price of single Power,	\$20
“ “ Thresher,	\$28
“ “ Separator and fixtures,	\$7
“ “ Bands for driving, etc.,	\$5 to \$10
“ “ Wood-sawing machine, complete, and in running order,	\$35
Price of Double Power,	\$100
“ “ with Thresher, Separator, &c.,	\$140 to \$150

All the above are sold singly or together, as desired, and are warranted to work well and give satisfaction.

A. B. ALLEN & CO., 189 and 191 Water st., N. Y.

FRENCH MERINO LUCK.—A very large and superior Merino Buck for sale, bred from the late importation from France by Mr. Talbot of Connecticut. He is two years old, and shears an uncommonly large and fair fleece. Price \$150, of

SAMUEL ALLEN, 189 Water St., New York.

